



CITY OF PLYMOUTH



ANNUAL REPORT

OF THE

MEDICAL OFFICER OF HEALTH

FOR THE YEAR 1947





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PUBLIC HEALTH AND MATERNITY AND CHILD WELFARE COMMITTEE.

The following Members of the City Council served on the Public Health and Maternity and Child Welfare Committee during the year :—

Chairman : Alderman (Mrs.) J. Marshall.

Vice-Chairman : Councillor (Mrs.) M. Jolly.

Alderman (Mrs.) C. H. Daymond.

Councillors A. E. Frayn, S. L. Gould, T. B. Harvey, I. C. Lowe, (Mrs.) L. Newbery, H. Porter, P. N. Washbourn, W. J. Wilks, G. F. Vosper (to November), F. M. Ryall (from November).

EDUCATION COMMITTEE.

Chairman : Alderman R. R. Oke (to November), Councillor G. N. Bradley (from November).

Vice-Chairman : Councillor E. S. Leatherby.

Aldermen J. L. Cornish, (Mrs.) C. H. Daymond, H. J. Perry, J.P., W. H. Weston (to November), H. G. Mason (to November), H. E. Wright (from November).

Councillors (Mrs.) P. L. F. Colmer, (Mrs.) B. Davey, (Mrs.) M. Jolly, A. Lisburne, S. C. Potter, H. S. Sangwell, W. E. Strawbridge, J. E. Hatherley (to November), J. H. W. Lobb (to November), F. W. H. Lyndon (to November), R. A. Smith (to November), H. L. Spear (to November), G. R. Delaforce (from November), F. J. Flawn (from November), F. T. Hicks (from November), R. King (from November), R. E. Mills (from November), D. F. Nash (from November), P. N. Washbourn (from November).

Rev. Canon N. Clarke, Mr. F. Cole, Mr. F. J. Collier, Mr. S. Griffin, Miss E. M. Leigh, Mr. H. G. Taylor, Rev. J. Twohig, Miss W. Drake (to November), Mr. H. Stipling (to November), Mr. A. L. Strachan (to November), Mr. K. M. Angus (from November), Mrs. Bull (from November), Mr. Burnard (from November).

SPECIAL SERVICES SUB-COMMITTEE.

Chairman : Councillor S. C. Potter.

Aldermen (Mrs.) C. H. Daymond, R. R. Oke (to November).

Councillors (Mrs.) B. Davey, (Mrs.) M. Jolly, E. S. Leatherby, A. Lisburne, H. S. Sangwell, J. E. Hatherley (to November), F. W. H. Lyndon (to November), G. N. Bradley (from November), G. R. Delaforce (from November), F. T. Hicks (from November), R. King (from November), D. F. Nash (from November).

Miss E. M. Leigh, Rev. J. Twohig, Mr. F. J. Collier, Mr. S. Griffin, Mr. H. Stipling (to November), Miss W. Drake (to November), Mrs. Bull (from November).

PUBLIC HEALTH OFFICERS OF THE AUTHORITY.

MEDICAL—WHOLE-TIME.

- X T. Peirson, M.D., M.R.C.S., L.R.C.P., D.P.H., Medical Officer of Health ; General Medical Superintendent, City Hospitals ; Port Medical Officer ; School Medical Officer.
- W. N. M. Mason, M.D., M.R.C.S., L.R.C.P., D.P.H., Deputy Medical Officer of Health ; Senior Assistant Port Medical Officer ; Medical Superintendent, Mount Gold Hospital.
- T. H. Harrison, M.B., L.M.S.S.A., D.P.H., Senior School Medical Officer.
- H. T. Chatfield, M.C., M.B., D.P.H., Clinical Tuberculosis Officer.
- D. F. Johnstone, L.R.C.P., M.R.C.S., D.P.H., Medical Superintendent, Isolation Hospital ; Venereal Diseases Medical Officer.
- X Marion Smellie, M.A., M.B., D.P.H., Senior Maternity and Child Welfare Medical Officer.
- Mildred A. Thynne, M.R.C.S., L.R.C.P., D.P.H., Assistant Maternity and Child Welfare Medical Officer.
- Hertha M. Tietze, M.D., Assistant Maternity and Child Welfare Medical Officer.
- Eirian Spickett, B.Sc., M.R.C.S., L.R.C.P., M.B., B.Ch., Assistant Maternity and Child Welfare Medical Officer.
- M. S. Harvey, M.B., D.P.H., Assistant M. and C.W. and School Medical Officer. (Resigned 29th December, 1947.)
- H. B. Boucher, M.B., F.R.C.S., Assistant Port Medical Officer.
- R. St. J. Harold, L.R.C.P. & S.I., D.P.H. (N.U.I.), Assistant Port Medical Officer.
- A. T. Bettinson, L.R.C.P., M.R.C.S., Medical Superintendent, Didworthy Sanatorium.
- G. E. Larks, M.B., CH.M., F.R.C.S. (ENG. AND EDIN.), Medical Superintendent, City (General) Hospital.
- G. B. Carter, M.D., D.P.H., Assistant School Medical Officer.

N. R. Matheson, M.B., CH.B., C.P.H., Assistant School Medical Officer.

J. H. Wood, M.B., CH.B., D.P.H., Assistant School Medical Officer
(commenced 18th August, 1947).

MEDICAL—PART-TIME.

Consulting Physician :—

W. A. Lister, M.D., F.R.C.P. (LOND.).

Consulting Paediatrician :—

T. A. A. Hunter, B.A., M.B., M.R.C.P. (LOND.). (Resigned
1st September, 1947.)

Consulting Surgeons :—

L. W. Innes, M.B., F.R.C.S. (ED.).

E. F. Wilson, F.R.C.S.

Orthopaedic Surgeons :—

N. Capener, F.R.C.S.

G. J. Lillie, F.R.C.S.

Consulting Gynaecologists :—

J. W. G. H. Riddell, M.C., M.D., F.R.C.S. (ED.), F.R.C.O.G.

A. B. Concanon, M.D., M.R.C.O.G., M.R.C.S., L.R.C.P., D.P.H.

Pathologist :—

E. Wordley, M.C., M.D., F.R.C.P.

Consulting Ophthalmologists :—

C. B. F. Tivy, M.B., M.CH.

W. S. Burr, M.B., F.R.C.S. (ED.), D.O.M.S.

G. K. Burr, M.B., CH.B., D.O.M.S.

P. R. Greeves, B.M., B.CH., F.R.C.S. (ED.), M.R.C.S. (ENG.),
L.R.C.P., D.O.M.S.

Consulting Laryngologists and Otologists :—

C. S. C. Prance, M.B., M.R.C.S., L.R.C.P., D.L.O.

R. Howarth, M.D., F.R.C.S. (ED.), D.L.O.

Consulting Radiologist :—

A. Craig Mooney, M.B., D.M.R.E.

Consulting Anaesthetists :—

S. G. Irlam, L.R.C.P., M.R.C.S.
T. T. P. Murphy, M.D., B.Sc., D.A.
T. L. Chester-Williams, M.R.C.S., L.R.C.P.
D. A. Cadman, M.D., M.B., CH.B., D.P.H.
C. H. Hutchinson, M.A., M.B.
S. Hawkes, M.B.

District Medical Officers :—

Plymouth :—

C. H. Hutchinson, M.A., M.B.
T. Wood, L.R.C.P., M.R.C.S.
J. E. Harford, M.B., D.P.H.
H. N. Hearle, M.R.C.S., L.R.C.P.

Devonport :—

J. N. Morris, L.R.C.P., M.R.C.S.
G. A. Pratt, L.R.C.P., M.R.C.S.
O. N. Morris, L.R.C.P., M.R.C.S.
M. E. Gordon, B.Sc., M.B., B.Ch., M.R.C.S., L.R.C.P.
C. R. Barker, L.R.C.P., M.R.C.S.

Stonehouse :—

J. Simpson-White, O.B.E., M.B.

PUBLIC VACCINATORS.

Devonport and Added Area of Plymouth :—

J. N. Morris, L.R.C.P., M.R.C.S.

Stonehouse :—

G. A. Pratt, L.R.C.P., M.R.C.S.

Plymouth—South :—

T. L. Chester-Williams, L.R.C.P., M.R.C.S. (to 31st March 1947.)
H. H. Cohen, B.Sc., M.R.C.S., L.R.C.P. (from 1st April, 1947.)

Plymouth—North :—

H. C. C. Reid, M.B. (to 31st March, 1947.)
C. Weston, M.A., M.R.C.S., L.R.C.P. (from 1st April, 1947.)

DENTAL SURGEONS—WHOLE-TIME.

J. F. A. Smyth, L.D.S., R.C.S. ; A. Maughan, M.C., L.D.S. ; E. R. Williams, L.D.S. ; J. F. Gray, L.D.S. ; R. A. Currie, L.D.S. ;
R. N. Maynard, L.D.S.

OTHER STAFF.

Chief Sanitary Inspector :—

C. E. Sanderson, F.R.SAN.I.*†‡

Port Sanitary Inspector :—

A. S. Kitt.*†

Meat Inspector :—

P. A. Hawthorn.*†

Superintendent Health Visitor .—

Miss D. Silk, S.R.N., S.C.M. (Resigned 8th December, 1947.)

X *Assistant Supervisor of Midwives :—*

Miss J. Casey, S.R.N., S.C.M.

Director of Nurse Training :—

Miss D. Biddle, S.R.N., S.C.M.

Chief Clerk :—

R. M. Lawson*, T.D.

Chief Clerk, School Medical Department :—

E. T. Perkins.

Steward, City Hospital :—

F. J. Barrett.

Steward, Mount Gold and City Isolation Hospitals :—

J. Burrows.

City Meteorologist :—

G. H. Ivory.

* Sanitary Inspector's Certificate.

† Meat Inspector's Certificate.

‡ Sanitary Science Certificate.

TO THE LORD MAYOR, ALDERMEN AND COUNCILLORS OF THE CITY
OF PLYMOUTH.

I have the honour to present to you my Annual Report on the health of the City of Plymouth for the year 1947.

The Registrar-General's estimate of the population is 181,600.

Births. The Plymouth birth rate again, as in 1946, considerably exceeded the rate for England and Wales, 24.72 per 1,000 population, compared with 20.5. The average birth rate for Plymouth for the 10 years previous to 1938 was 15.4. This high number of births, along with a shortage of trained midwives, resulted in a heavy strain on the domiciliary midwifery service, both Municipal and the Three Towns Nursing Association, particularly when, at short notice, maternity bed accommodation had to be closed because of attacks of gastro-enteritis amongst new-born infants in hospitals.

In order to enable the midwives to carry out their increased work, covering often twenty-four hour periods of duty, the Council instituted an allowance scheme to those midwives who were able to purchase cars. There appears to be no effective method whatever of priority to district midwives for delivery of a small car. In spite of all efforts there are midwives without any car at all who have been waiting up to two years and over for delivery. This is very difficult to understand.

The number of deaths due to pregnancy and child-bearing was a low record of 3, or maternal mortality rate of .65 per 1,000 births. For the first time ever recorded there were no deaths due to sepsis following childbirth. Whilst this reflects credit upon the standard of midwifery in the City, the extended use of sulphonamides and penicillin in prevention and treatment of sepsis must be a potent factor.

Infectious Diseases. There was a heavy incidence of measles during the year, 2,552 cases being notified with 9 deaths, 4 of which were under one year of age.

Although poliomyelitis ("infantile paralysis") was unduly prevalent throughout most of the Country during the second half of the year, Plymouth fortunately was comparatively lightly

affected, there being a total of 8 cases with no deaths. In this connection I would refer to the notes by Dr. D. F. Johnstone, Medical Superintendent of the City Isolation Hospital, on Infantile Paralysis and its Treatment on page 86.

Another piece of useful field work on the subject of immunisation against whooping cough was carried out by Dr. M. Harvey, an Assistant Medical Officer, and is reported on page 69.

The Council's scheme of immunisation against diphtheria shows excellent results. During 1947 there were a total of 49 cases of diphtheria and only one child died. The average number of cases in pre-war years was about seven times as many and in 1938 fifteen died.

The percentage of the child population of the City protected by immunisation against diphtheria is recorded in this report as 40% of children under five years and 68% of children between five and fifteen years. The actual percentage of protected children must be considerably higher than this by reason of the immunisation carried out by doctors in their practices, about which the Department receives no information.

I take this opportunity of recording my appreciation of the loyal work of my staff.

I am, my Lord Mayor, Ladies and Gentlemen,

Your obedient servant,

T. PEIRSON.

SEVEN TREES,
LIPSON ROAD,
PLYMOUTH.

July, 1948.

Statistics and Social Conditions of the Area

1947

Area in acres (Land and Inland Water)	...	...	9,515
Rateable value of the City	...	...	£1,642,239
Sum represented by the penny rate (estimated)	...		£6,380
Registrar-General's estimate of the civilian population			181,600
No. of marriages in the City during 1947	..	..	1,921

SOCIAL WELFARE.

No. of persons in receipt of Out-door relief on the 31.12.47.

<i>Men.</i>	<i>Women.</i>	<i>Children.</i>	<i>Total.</i>
264	664	521	1,449

SOCIAL CONDITIONS.

No. of unemployed persons in the City on the 31st December, 1947.

	<i>Age.</i>	<i>Total.</i>
Men ...	18 and over	1,191
Boys ...	14-17	32
Women ...	18 and over	834
Girls ...	14-17	67

<i>Live Births.</i>	<i>Total.</i>	<i>M.</i>	<i>F.</i>	
Legitimate ...	4205	2190	2015	Birth-rate per 1,000
Illegitimate ...	285	146	139	of the estimated
	—	—	—	civilian population
	4490	2336	2154	=24.72

<i>Still births.</i>				
Legitimate ...	94	49	45	Still birth-rate per
Illegitimate ...	3	3	—	1,000 total (live and
	—	—	—	still) births=21.14
	97	52	45	
	—	—	—	

<i>Deaths under 1 year :—</i>				<i>Death-rate of infants</i>
Legitimate ...	206	124	82	under one year
Illegitimate ...	18	12	6	per 1,000 live
	—	—	—	births=49.88
	224	136	88	
	—	—	—	
All deaths	2559	1326	1233	Death-rate per 1,000
				of estimated
				population=14.09

Death-rate of infants under one year of age :—

All infants per 1,000 live births (Total deaths 224) ...	49.86
Legitimate infants per 1,000 legitimate live births (206) ...	48.98
Illegitimate infants per 1,000 illegitimate live births(18) ...	63.16

Deaths from Puerperal Causes (headings 29 and 30 of the Registrar-General's Short List) :—

	<i>Deaths.</i>	<i>Rate per 1,000 total (live and still) births.</i>
No. 29. Puerperal and post-abortive sepsis	—	—
No. 30. Other maternal causes ...	3	0.65
	—	—
	3	0.65
	==	==

Deaths from Gastro-Enteritis under 2 years of age ...	54
Mortality Rate per 1,000 Live Births	1.63

Laboratory Facilities. The following tables show the bacteriological and pathological work carried out for the City at the Prince of Wales's (Greenbank) Hospital, Plymouth.

7,176 specimens were examined for the Public Health Authorities of the City. The nature of these examinations is as follows :—

Sputums for Tubercle	2933
Swabs for Diphtheria	1704
Bacteriological Counts on Milks	772
,, ,, Waters	476
,, ,, Ice-Creams	48
,, ,, Shell-fish... ..	12
Hairs for Ringworm	3
Bacteriological Examinations for Infectious diseases—	
Urines	184
T. Swabs for Vincents organisms	93
T. Swabs for Haemolytic Streptococci	213
Blood Counts	232
Blood Agglutinations	39
C.S.F. Examinations (including 9 Lange)	81
Sections	21
Animal Inoculations (Rats)	4
Zondek Ascheims	3
Examination of Food (6 Prunes, 1 Herring)	7

Examination of Faeces (including 8 for food poisoning)				94
Miscellaneous Examinations	...	...	...	257
	Total	...	...	<u>7176</u>
For V.D. Clinics—				
Wassermann and Kahns	...	...		3716
Gonococci	...	...	...	3331
Gonococcal Fixation Tests	...	...		464
Others (Cultures, etc.)	...	...	...	340
C.S.F.	...	...	...	3
	Total	...	...	<u>7854</u>
For Medical Practitioners—				
Wassermanns and Kahns	...	...		224
Gonococci	...	...	...	43
Gonococcal Fixations Tests	...	...		3
	Total	...	...	<u>270</u>
For Other Hospitals:—				
Wassermanns and Kahns	...	...	...	4938
Gonococci	...	...	...	62
Gonococcal Fixation Tests	...	...	...	6
C.S.F. (Wassermanns)	...	...	...	19
Vaginal Pus for Trichomonas	...	...		3
	Total	...	...	<u>5028</u>
For City Hospital:—				
Microscopical Examinations on Morbid Tissues..				408
Bacteriological Examinations	..	..		2118
Blood Counts	..	..	..	1469
Biochemical Examinations	..	..	..	2283
Wassermanns and Kahns	...	...	...	800
G.C. Smears	...	...	...	190
Gonococcal Fixation Tests	...	...	...	4
Sputums for T.B.	..	..	..	295
Zondek Ascheims	..	..	..	29
C.S.F. Examinations	...	...	...	167
C.S.F. Wassermanns	...	...	...	61
Agglutinations	..	..	..	20
Vaginal Pus for Trichomonas	...	...		6
	Total	...	...	<u>7850</u>

PUBLIC HEALTH COMMITTEE

CLIMATOLOGICAL OBSERVATIONS.

TAKEN AT THE 'HOE,' PLYMOUTH, DURING THE YEAR 1947

	1947.	1946.	50 Years Average.
TEMPERATURES.			
Maximum	87.0 (Aug. 16th)	74.8 (July 13th)	—
Minimum	16.0 (Jan. 29th) (Feb. 1st)	21.0 (Dec. 21st)	—
Mean	51.5	51.5	51.4
Daily Range	10.4	9.6	10.8
Relative Humidity	78%	78%	82%
EARTH TEMPERATURES.			
Earth, 1 ft. deep	52.6	53.1	52.2*
Earth, 4 ft. deep	52.7	53.4	52.6‡
Minimum on Grass	13.9 (Jan. 29th)	11.6 (Dec. 21st)	—
SEA TEMPERATURE.			
Mean, 6 ft. deep	53.5	53.8	53.2*
RAINFALL.			
Total during year	37.58"	46.46"	37.45"
Greatest Daily Fall	1.22" (June 27th)	1.58" (Nov. 23rd)	—
No. of Wet Days	186	197	188
SUNSHINE.			
Total Hours	1535.0	1517.9	1683.3
Greatest Daily Amount	15.0 (June 22nd)	14.9 (June 13th) (July 7th)	—
No. of Sunless Days	67	66	62
WIND.			
Prevailing Direction	S.S.W.	S.W.	S.W.
Highest Velocity (Gust)	63 m.p.h. (Apr. 23)	62 m.p.h. (Jan. 9th) (Dec. 8th)	—

* Denotes a 45 year Average.

‡ Denotes a 27 year Average.

G. H. IVORY & PARTNERS,
24 Athenaeum Street,
Plymouth.

TABLE I.
VITAL STATISTICS—PLYMOUTH—1914-1947.

Year.	Estimated Mid-year Population (a) Civilian (b) Total Resident.	Birth Rate.	Death. Rate.	Infant Mortality Rate per 1,000 Births.	CRUDE DEATH-RATES PER 1,000 POPULATION FROM						
					Measles.	Scarlet Fever.	Whoop- ing Cough.	Diph- theria.	Tuberculosis.		Cancer.
									Respira- tory.	Other Forms.	
1914	212,421 (b)	23.70	15.50	109.70	.26	.05	.22	.25	1.23	.37	1.08
1915	187,911 (a)	19.90	17.40	119.30	.61	.04	.13	.23	1.26	.45	1.15
1916	184,473 (a)	21.60	16.10	90.60	.26	.02	.08	.28	1.37	.35	1.24
1917	179,375 (a)	19.39	16.44	96.95	.46	.01	.11	.17	1.25	.49	1.33
1918	179,629 (a)	19.17	18.90	96.63	.31	.03	.32	.09	1.67	.49	1.16
Average		20.75	16.86	102.63	.38	.03	.17	.20	1.35	.43	1.19
1919	181,967 (a)	21.62	15.48	85.85	.16	.02	.02	.20	1.27	.40	1.38
1920	189,218 (a)	26.35	14.48	74.78	.18	.00	.17	.19	1.03	.24	1.29
1921	199,860 (a)	21.21	12.5	77.52	.01	.02	.05	.06	1.04	.21	1.34
1922	200,370 (a)	19.65	14.4	74.31	.22	.01	.10	.07	1.09	.24	1.25
1923	193,017 (a)	19.49	12.7	50.67	.03	.00	.04	.05	1.04	.23	1.40
Average		21.66	13.91	72.62	.12	.01	.07	.11	1.09	.26	1.33
1924	192,900 (a)	18.16	14.3	81.53	.13	.00	.16	.11	1.08	.22	1.31
1925	197,378 (a)	18.1	12.2	63.0	.01	.01	.07	.04	0.91	.22	1.36
1926	187,300 (a)	17.2	12.3	71.9	.10	.01	.07	.18	0.95	.18	1.49
1927	187,600 (a)	16.5	12.0	61.0	.00	.02	.06	.12	0.97	.16	1.58
1928	187,600 (a)	17.0	12.0	69.2	.41	.01	.02	.17	0.85	.17	1.52
Average		17.59	12.5	69.32	.13	.01	.07	.12	0.95	.19	1.45
1929	199,000 (a)	16.5	12.6	59.5	.02	.02	.17	.13	0.84	.12	1.39
1930	199,000 (a)	15.9	11.8	60.0	.14	.03	.02	.11	0.84	.17	1.47
1931	191,800 (a)	16.4	13.5	66.8	.01	.01	.05	.08	0.69	.20	1.48
1932	208,440 (b)	15.59	12.55	58.44	.02	.04	.07	.09	0.78	.15	1.49
1933	206,200 (b)	15.67	13.23	58.16	.06	.01	.06	.08	0.86	.12	1.47
Average		16.01	12.73	60.58	.05	.02	.07	.10	0.80	.15	1.46
1934	203,450 (b)	15.7	12.05	53.69	.06	.00	.08	.07	0.82	.17	1.59
1935	203,600 (b)	15.0	12.25	59.70	.02	.00	.01	.11	0.56	.15	1.58
1936	206,400 (b)	14.8	12.25	55.86	.01	.00	.09	.19	0.60	.13	1.57
1937	210,460 (b)	14.6	12.79	45.88	.00	.00	.01	.08	0.70	.07	1.63
1938	211,800 (b)	15.6	11.95	53.25	.12	—	.05	.07	0.64	.13	1.54
Average		15.14	12.25	53.67	.04	.00	.05	.10	0.66	.13	1.58
1939	215,500 (a)	15.6	12.61	42.04	—	—	—	.11	0.64	.12	1.65
1940	197,800 (a)	16.6	15.72	59.69	.02	—	.00	.53	0.83	.13	1.85
1941	149,300 (a)	16.43	23.87	77.49	.08	—	.07	.18	0.94	.15	2.25
1942	127,300 (a)	22.12	15.51	51.82	.00	—	.01	.12	0.95	.23	2.51
1943	136,530 (a)	23.03	16.69	37.53	.06	—	.06	.07	0.92	.20	2.34
Average		18.75	16.88	53.71	.03	—	.03	.20	0.85	.16	2.12
1944	144,700 (a)	24.03	14.66	39.98	.00	—	.00	.02	0.86	.12	2.13
1945	157,580 (a)	24.27	15.55	55.96	.00	—	.01	.03	0.79	.10	2.18
1946	176,070 (a)	24.26	13.87	46.11	.00	—	.02	.01	0.60	.14	2.06
1947	181,600 (a)	24.72	14.09	49.88	.05	—	.01	.01	0.77	.16	1.83

Note.—A series of dashes indicates that there were no deaths from that particular disease during that year.

A "0" preceding a decimal point indicates that in some previous year the rate was greater than unity.

A rate of .00 indicates that there were too few deaths during that year to be expressed as a rate to two decimal places.

TABLE II.

VITAL STATISTICS—PLYMOUTH—1914-1947.

YEAR.	STILLBIRTHS.		INFANT MORTALITY		NEO-MORTALITY.		MATERNAL MORTALITY.					
	No.	Rate per 1,000 Live and Still Births.	No. of Deaths under 1 year.	Rate per 1,000 Live Births.	No. of Deaths under 4 weeks.	Rate per 1,000 Live Births.	SEPSIS.		OTHERS.		TOTAL.	
							No. of Deaths.	Rate per 1,000 Live and Still Births.	No. of Deaths.	Rate per 1,000 Live and Still Births.	No. of Deaths.	Rate per 1,000 Live and Still Births.
1914	51	10.02	553	109.7	215	42.68	5	.98	22	4.32	27	5.30
1915	29	6.80	505	119.3	145	34.26	6	1.41	17	3.98	23	5.39
1916	64	14.51	394	90.6	140	32.20	4	.90	20	4.53	24	5.43
1917	59	17.57	376	96.95	137	35.33	2	1.50	15	3.81	17	4.31
1918	133	33.24	373	96.63	132	34.20	5	1.25	14	3.50	19	4.75
Average	67	16.43	444	102.63	154	35.73	4	1.21	17	4.03	22	5.03
1919	143	33.70	352	85.85	135	32.93	5	1.18	18	4.24	23	5.42
1920	153	27.61	403	74.78	182	33.78	4	.73	22	3.96	26	4.69
1921	?	?	347	77.52	153	34.18	3	.67	12	2.68	15	3.35
1922	134	31.22	309	74.31	153	36.81	4	.93	17	3.96	21	4.89
1923	129	30.33	209	50.67	102	24.74	5	1.17	12	2.82	17	3.99
Average	139	30.71	324	72.62	145	32.49	4	.94	16	3.53	20	4.47
1924	125	32.23	306	81.53	128	34.11	6	1.54	19	4.90	25	6.44
1925	?	?	243	63.0	117	30.54	3	.78	15	3.91	18	4.69
1926	?	?	262	71.9	106	29.12	3	.83	8	2.19	11	3.02
1927	?	?	214	61.0	112	31.99	11	3.15	16	4.56	27	7.71
1928	149	39.64	250	69.2	121	33.53	5	1.38	17	4.71	22	6.09
Average	137	35.93	255	69.32	117	31.85	5	1.53	15	4.05	20	5.59
1929	147	40.03	210	59.5	111	31.49	6	1.76	11	2.86	17	4.62
1930	179	49.73	208	60.0	93	27.19	8	2.22	18	5.00	26	7.22
1931	128	36.00	229	66.8	102	29.77	1	.29	8	2.33	9	2.62
1932	153	44.94	190	58.44	97	29.84	8	2.35	12	3.52	20	5.87
1933	126	37.53	188	58.16	107	33.11	7	.69	13	5.26	20	5.95
Average	147	41.64	205	60.58	102	30.28	6	1.46	12	3.79	18	5.25
1934	118	35.5	172	53.96	91	28.41	6	1.81	8	2.40	14	4.21
1935	124	38.8	183	59.70	103	33.60	9	2.82	7	2.19	16	5.01
1936	120	37.7	171	55.86	77	25.16	5	1.57	4	1.26	9	2.83
1937	118	36.9	141	45.88	66	21.48	7	2.19	10	3.13	17	5.32
1938	140	40.6	176	53.25	87	26.32	2	0.58	5	1.45	7	2.03
Average	124	37.9	168	53.73	85	26.99	6	1.79	7	2.03	12	3.88
1939	127	35.5	145	42.04	82	23.79	2	0.55	9	2.51	11	3.06
1940	117	34.2	197	59.69	95	28.83	7	2.04	4	1.17	11	3.21
1941	82	32.3	178	77.49	75	30.57	2	0.84	4	1.68	6	2.52
1942	87	29.9	146	51.82	85	30.17	2	0.69	8	2.75	10	3.44
1943	103	31.7	118	37.53	57	18.13	5	1.54	7	2.15	12	3.69
Average	103	32.7	157	53.71	79	26.29	4	1.13	6	2.05	10	3.18
1944	99	27.6	139	39.98	80	23.01	3	0.84	4	1.12	7	1.96
1945	111	28.2	214	55.96	112	29.28	3	0.76	14	3.56	17	4.32
1946	101	23.09	197	46.11	113	26.45	1	0.22	5	1.14	6	1.36
1947	97	21.14	224	49.88	127	28.28	—	—	3	.65	3	.65

DEATHS UNDER FIVE YEARS OF AGE—BY CAUSES AND AGE GROUPS.

(CLASSIFIED LOCALLY UNDER THE REGISTRAR-GENERAL'S DETAILED LIST)

FOR THE 52 WEEKS ENDED 27TH DECEMBER, 1947.

Cause of Death	Under 1 wk.		1-2 wk.		2-3 wk.		3-4 wk.		Total under 1 mth.		1-3 mths.		3-6 mths.		6-9 mths.		9-12 mths.		Total under 1 yr.		1-2 years.		2-3 years.		3-4 years.		4-5 years.		Total under 5 yrs.	
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
CLASS 1.																														
Cerebro-Spinal Fever ...	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	2	-	
Whooping Cough ...	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	1	-	1	
T.B. of Respiratory System	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-	2	-	-	-	-	-	3	-	4	
Tuberculous Meningitis ...	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1	4	2	-	-	1	-	5	1	-	
Disseminated Tuberculosis	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	
Syphilis ...	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Measles ...	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	1	1	2	2	-	2	-	1	1	-	-	3	5		
CLASS 2.																														
Cancer of Urinary Organs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	
Cancer of Brain ...	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CLASS 3.																														
Other General Diseases ...	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CLASS 4.																														
Haemorrhagic Conditions	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	-	-	2	
Anaemias ...	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CLASS 6.																														
Meningitis ...	-	-	-	-	-	-	-	-	-	-	-	-	1	-	1	-	-	-	2	-	-	-	-	-	1	-	2	1		
Intra Cranial Lesions of Vascular Origin ...	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CLASS 8.																														
Bronchitis ...	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	1	-	-	1	1	-	-	1	2	-	-	2	3		
Bronchial Pneumonia ...	-	-	1	3	4	-	-	-	5	3	17	5	8	7	4	4	-	1	34	20	2	-	-	1	-	1	37	22		
Pneumonia ...	-	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	1	1	1	1	-	-	-	-	-	1	1			
Other Respiratory Diseases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
CLASS 9.																														
Other Diseases of Stomach	-	-	-	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1	-		
Diarrhoea and Enteritis ...	-	-	8	5	13	4	6	7	27	16	6	1	1	-	1	-	1	-	36	17	-	-	-	-	-	-	36	17		
CLASS 14.																														
Congenital Malformation ...	3	1	-	-	-	-	1	-	4	1	3	-	1	1	-	1	-	1	8	4	1	-	-	-	-	-	9	4		
CLASS 15.																														
Congenital Debility ...	-	-	-	1	-	2	1	-	1	3	-	-	1	-	1	-	-	-	3	3	-	-	-	-	-	-	3	3		
Premature Brith ...	14	17	2	2	5	3	1	-	22	22	2	-	-	-	-	-	-	24	22	-	-	-	-	-	-	24	22			
Injury at Birth ...	4	2	-	-	1	-	-	-	5	2	-	-	-	1	-	-	-	5	3	-	-	-	-	-	-	5	3			
Other Diseases of early infancy ...	5	5	4	-	-	-	-	-	9	5	2	3	1	1	3	-	-	1	15	10	-	-	-	-	-	-	15	10		
CLASS 17.																														
Road Accidents ...	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	1	-	-	1	-	-	-	-	1	1		
Conflagration ...	-	-	-	-	-	-	-	-	-	1	-	-	-	1	-	-	1	-	1	2	-	1	-	-	-	-	1	3		
Suffocation ...	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	-		
Drowning ...	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
TOTAL ...	26	25	15	11	24	10	9	7	74	53	31	10	14	12	11	7	4	5	134	87	10	6	4	6	4	3	2	1	154	103

DEATHS BY AGE GROUPS AND CAUSES—PLYMOUTH—1947.
AS CLASSIFIED BY THE REGISTRAR GENERAL.

CAUSE OF DEATH	0-1 years.		1-5 years.		Total under 5 years.		5-15 years.		15-45 years.		45-65 years.		65 and upwards.		Totals all ages.		GRAND TOTAL.
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	
1. Typhoid and Paratyphoid Fevers ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
2. Cerebro-spinal Fever ...	—	—	2	—	2	—	1	—	—	—	—	—	—	—	3	—	3
3. Scarlet Fever ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
4. Whooping Cough ...	—	—	1	1	1	1	—	—	—	—	—	—	—	—	1	1	2
5. Diphtheria ...	—	—	—	—	—	—	—	1	—	—	1	—	—	—	1	1	2
6. Tuberculosis—Respiratory System ...	1	—	1	1	2	1	—	—	41	43	31	11	9	3	83	58	141
7. Other forms of Tuberculosis ...	—	1	7	2	7	3	1	6	5	6	1	—	—	1	14	16	30
8. Syphilitic Disease ...	—	—	—	—	—	—	—	—	1	—	9	3	1	2	11	5	16
9. Influenza ...	—	—	—	—	—	—	—	—	—	—	—	2	4	—	4	2	6
10. Measles ...	2	2	1	3	3	5	1	—	—	—	—	—	—	—	4	5	9
11. Acute Poliomyelitis and Polio- encephalitis ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
12. Acute Infectious Encephalitis ...	—	—	—	—	—	—	—	—	2	—	—	—	—	1	2	1	3
13. M. Cancer of buccal cavity and Oesophagus (males) ...	—	—	—	—	—	—	—	—	—	—	3	—	24	—	27	—	27
13. F. Cancer of Uterus (females) ...	—	—	—	—	—	—	—	—	—	3	—	15	—	16	—	34	34
14. Cancer of Stomach and Duodenum ...	—	—	—	—	—	—	—	—	—	1	8	3	21	13	29	17	46
15. Cancer of Breast ...	—	—	—	—	—	—	—	—	—	2	—	17	1	14	1	33	34
16. Cancer of all other sites ...	—	—	1	—	1	—	—	1	4	5	42	32	63	44	110	82	192
17. Diabetes ...	—	—	—	—	—	—	—	—	—	1	—	4	7	8	7	13	20
18. Intra-cranial vascular lesions ...	—	—	—	—	—	—	—	—	2	5	33	29	76	125	111	159	270
19. Heart diseases ...	—	—	—	—	—	—	1	—	18	7	111	46	253	311	383	364	747
20. Other diseases of circulatory system ...	—	—	—	—	—	—	—	—	2	—	10	9	33	33	45	42	87
21. Bronchitis ...	1	1	1	2	2	3	—	—	2	—	20	9	37	66	61	78	139
22. Pneumonia ...	35	21	2	2	37	23	1	1	3	3	16	7	18	25	75	59	134
23. Other respiratory diseases ...	—	—	—	—	—	—	—	—	5	—	12	4	13	5	30	9	39
24. Ulceration—stomach or duodenum...	—	—	—	—	—	—	—	—	2	—	7	—	5	4	14	4	18
25. Diarrhoea (under 2 years of age) ...	36	18	—	—	36	18	—	—	—	—	—	—	—	—	36	18	54
26. Appendicitis ...	—	—	—	—	—	—	—	—	2	—	1	—	—	1	3	1	4
27. Other digestive diseases ...	1	1	—	—	1	1	—	1	3	3	10	5	15	12	29	22	51
28. Nephritis ...	—	—	—	—	—	—	—	—	2	2	9	7	18	21	29	30	59
29. Puerperal and post-abortive sepsis ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
30. Other Maternal causes ...	—	—	—	—	—	—	—	—	—	3	—	—	—	—	—	3	3
31. Premature birth ...	20	24	—	—	20	24	—	—	—	—	—	—	—	—	20	24	44
32. Congenital malformations, birth injury and infantile disease ...	34	15	1	—	35	15	—	—	1	—	1	—	—	—	37	15	52
33. Suicide ...	—	—	—	—	—	—	—	—	3	1	4	3	4	1	11	5	16
34. Road traffic accidents ...	—	—	1	1	1	1	—	1	5	—	3	1	1	2	10	5	15
35. Other violent causes ...	1	2	1	1	2	3	2	—	9	1	8	1	2	11	23	16	39
36. All other causes ...	5	3	1	3	6	6	2	6	5	11	20	15	79	73	112	111	223
TOTAL ALL CAUSES ...	136	88	20	16	156	104	9	17	117	97	360	223	684	792	1326	1233	2559

MEDICAL OUT-RELIEF WORK

<i>District.</i>	<i>No. of visits to Patients' Homes.</i>	<i>Attendances at Surgery.</i>	<i>No. on Permanent Medical Relief List.</i>
1	No Return		291
2	190	350	317
3	480	860	258
4	570	630	299
5	631	835	300
6	475	828	300
7	359	711	269
8	365	337	294
9	No Return		106
10	737	197	362

Maternity and Child Welfare

REPORT OF SENIOR ASSISTANT MEDICAL OFFICER.

Births. The live birth rate for 1947 is 24.72 per 1,000 of the estimated civilian population (181,600).

The war-time increase in the local birth rate has been maintained and exceeded.

In 1938 Plymouth's birth-rate was 15.6, and the average for ten years previous to that was only 15.4. We have to go back to 1921 before we find a birth-rate exceeding 20 per 1,000.

The 1947 birth-rate for England and Wales is 20.5.

	<i>Notified</i>	<i>Registered</i>	<i>Allocated</i>
Total live births (legitimate and illegitimate)	4171	4195	4490
Total still births (legitimate and illegitimate)	107	107	97
Total births	<u>4278</u>	<u>4302</u>	<u>4587</u>
Illegitimate births—live	99	99	285
still births	—	—	3
Total	<u>99</u>	<u>99</u>	<u>288</u>
No. of births notified by doctors and parents ... ..	...	...	382
No. of births notified by midwives ... ..	...	...	3896
			<u>4278</u>

PLACE OF CONFINEMENT.

Own home by municipal midwife	1193
Own home by municipal midwife with doctor	235
Own home by private midwife	80
Own home by private midwife with doctor	92
Own home by T.T.N.A. district midwife	353
Own home by T.T.N.A. district midwife with doctor	199
Alexandra Maternity home by midwife	795
Alexandra Maternity home by midwife with doctor	278
City Hospital by midwife	603
City Hospital by midwife with doctor	196
Military Families' Hospitals by midwife with doctor	26
Prince of Wales' Hospital, Devonport	1
Royal Naval Hospital	1
Private nursing homes—doctor	129
Doctors' District cases	97
Total	<u>4278</u>

Stillbirths. The still birth rate is 21.15 per 1,000 allocated births, and 0.53 per 1,000 of the civilian population. This is just slightly higher than the rate for the country as a whole.

STILL BIRTH RATE.

Year.	England and Wales.	Plymouth.	
	Per 1,000 population.	Per 1,000 births.	Per 1,000 population.
1936	0.61	37.72	0.58
1937	0.60	36.97	0.56
1938	0.60	40.6	0.66
1939		35.5	0.59
1940	0.55	34.29	0.59
1941	0.51	32.3	0.41
1942	0.54	29.95	0.68
1943	0.51	31.7	0.75
1944	0.50	27.68	0.68
1945	0.46	28.20	0.70
1946	0.53	23.09	0.57
1947	0.50	21.15	0.53

No. of notified still births (institutional 74 ; domiciliary 37) ... *111

Institutional.

City Hospital	49
Flete Maternity Home	4
Alexandra Maternity Home	20
Military Families' Hospital	1
	<u>74</u>

Domiciliary.

Municipal Midwife	24
Private Midwife	2
Three Towns Nursing Association Midwife	11
	<u>37</u>
Doctor in attendance	81
Midwife only in attendance	30
	<u>111</u>
Female still births	50
Male still births	61
	<u>111</u>

* This number includes 2 pairs of twins, and 2 babies of a triplet pregnancy.

The following information has been extracted from a survey of the records of 111 notified still births.

(a) Macerated : 39.

Duration of pregnancy.

Over 40 weeks ...	...	...	...	...	1
40 weeks ...	...	...	...	...	14
36-39 weeks ...	...	...	...	...	12
32-35 weeks ...	...	...	...	...	7
Under 32 weeks ...	...	...	...	...	5
					<hr/>
					39
					<hr/>

Parity.

1st pregnancy ...	...	...	...	...	15
2nd pregnancy ...	...	...	...	...	9
3rd pregnancy ...	...	...	...	...	6
4th pregnancy ...	...	...	...	...	4
5th pregnancy ...	...	...	...	...	1
Over 5th pregnancy ...	...	...	...	...	4
					<hr/>
					39
					<hr/>

Pre-natal supervision.

Satisfactory ...	...	...	...	...	37
No supervision ...	...	...	...	...	2
					<hr/>
					39
					<hr/>

Standard of living.

Good ...	...	...	...	...	10
Fair ...	...	...	...	...	21
Poor ...	...	...	...	...	4
Not known ...	...	...	...	...	1
Not given ...	...	...	...	...	3
					<hr/>
					39
					<hr/>

Causes.

(a) Post mature.

Not known ...	...	...	...	...	1
					<hr/>

(b) Full-term.

Associated with hydrocephalus ...	...	...	...	...	2
Toxaemia ...	...	...	...	...	1
Disproportion ...	...	...	...	...	1
A.P.H. (lateral placenta praevia) ...	...	...	...	...	1
Associated with long 1st stage ...	...	...	...	...	1
Cord round neck ...	...	...	...	...	3
Cord prolapsed ...	...	...	...	...	1
Not known ...	...	...	...	...	4
					<hr/>
					14
					<hr/>

36-39 weeks.						
Associated with anencephaly	...	...	...	...	...	1
Pre-eclampsia	...	...	...	...	...	1
Associated with A.P.H.	...	...	...	...	...	1
Triplet pregnancy (2nd triplet)	...	...	...	...	...	1
Twin pregnancy	...	...	...	...	...	2
Version	...	...	...	...	...	1
R.H. Factor	...	...	...	...	...	2
Associated with tuberculosis	...	...	...	...	...	1
Not known	...	...	...	...	...	2
						<hr/> 12
32-35 weeks.						
Associated with anencephaly	...	...	...	...	...	1
Toxaemia	...	...	...	...	...	1
Mult. deformities	...	...	...	...	...	1
A.P.H.	...	...	...	...	...	1
Cord round neck and arms	...	...	...	...	...	1
Not known	...	...	...	...	...	2
						<hr/> 7
Under 32 weeks.						
Associated with hydrocephalus	...	...	...	...	...	1
Unhealthy placenta	...	...	...	...	...	1
Mult. pregnancy—hyperemesis (1st twin)	...	...	...	...	...	1
Not known	...	...	...	...	...	2
						<hr/> 5

(b) Premature but not macerated : 25.

Duration of pregnancy						
36 weeks	...	...	...	...	...	4
32-35 weeks	...	...	...	...	...	13
30-32 weeks	...	...	...	...	...	1
30 weeks	...	...	...	...	...	1
28 weeks	...	...	...	...	...	6
						<hr/> 25
Parity.						
1st pregnancy	...	...	...	...	...	6
2nd pregnancy	...	...	...	...	...	10
3rd pregnancy	...	...	...	...	...	3
4th pregnancy	...	...	...	...	...	2
5th pregnancy	...	...	...	...	...	1
Over 5th pregnancy	...	...	...	...	...	3
						<hr/> 25
Pre-natal supervision.						
Satisfactory	...	...	...	...	...	24
No supervision	...	...	...	...	...	1
						<hr/> 25

Standard of living.						
Good	...	...	...	...	...	6
Fair	.	...	...	...	...	13
Poor	...	...	...	...	...	1
Not known	...	...	...	...	...	2
Not given	...	...	...	...	...	3
						<hr/>
						25
						<hr/>

Causes.

36 weeks.						
A.P.H.	...	...	(M. 3)	...	...	3
Cord round neck	...	...	(Pr. 1)	...	...	1
						<hr/>
						4
						<hr/>

32-35 weeks.						
Associated with anencephaly (M. 1)	...					1
Anencephaly associated with hydramnios (M. 1)	...	...	...	...	...	1
A.P.H. (Pr. 2 ; M. 3)	...	...	...	...	...	5
Associated with breech presentation (M. 1 ; Pr. 1)	...	...	...	...	...	2
Associated with breech/footling (M. 1)	...					1
Transverse lie (M. 1)	...	...	...	...	...	1
Toxaemia + cord round neck (Pr. 1)	...					1
Toxaemia (caesar) (M. 1)	...	...	...	...	...	1
						<hr/>
						13
						<hr/>

30-32 weeks.						
A.P.H. (lateral placenta praevia) (M. 1)	...					1
						<hr/>

30 weeks.						
Not known (Pr. 1)	...	...	...	...	...	1
						<hr/>

28 weeks.						
Twin pregnancy associated with hyperemesis (2nd twin) (M. 1)	...	...	...	...	...	1
Twin pregnancy associated with hydramnios and unhealthy placenta (M. 1)	...	...	...	...	...	1
Twin pregnancy associated with hydramnios and cord round neck (M. 1)	...	...	...	...	...	1
						<hr/>
						3
						<hr/>

28 weeks.						
Associated with breech presentation (M. 1)	...					1
Transverse lie (M. 1)	...	...	...	...	...	1
A.P.H. (M. 1)	...	...	...	...	...	1
						<hr/>
						3
						<hr/>

(c) Still born at or near term	...	...	...	...	...	47
In good condition	...	...	...	...	...	42
With congenital malformation	...	...	...	...	...	5

Parity.

1st pregnancy ...	...	...	...	...	17
2nd pregnancy ...	...	...	...	...	10
3rd pregnancy ...	...	...	...	...	3
Over 3rd pregnancy ...	...	...	...	...	12
					<hr/>
					42
					<hr/>

Age.

20 years and under ...	...	...	...	...	1
21-24 years ...	...	...	...	...	2
25-29 years ...	...	...	...	...	14
30-34 years ...	...	...	...	...	11
35-39 years ...	...	...	...	...	11
40 years and over ...	...	...	...	...	3
					<hr/>
					42
					<hr/>

Pre-natal supervision.

Satisfactory ...	...	...	...	...	40
No supervision ...	...	...	...	...	2
					<hr/>
					42
					<hr/>

Standard of living.

Good ...	...	...	...	...	14
Fair ...	...	...	...	...	21
Poor ...	...	...	...	...	1
Not given ...	...	...	...	...	6
					<hr/>
					42
					<hr/>

Delivery.

Spontaneous ...	...	...	...	...	23
Instrumental ...	...	...	...	...	13
Caesarean section ...	...	...	...	...	3
Manual ...	...	...	...	...	3
					<hr/>
					42
					<hr/>

Causes.

Dystocia	...	...	(M. 7 ; Pr. 5)	...	12
Cord, prolapsed	...	...	(M. 3)	...	3
Cord round neck	...	...	(M. 2 ; Pr. 4)	...	6
A.P.H.	...	...	(M. 7)	...	7
Extended breech	...	...	(Pr. 1 ; M. 1)	...	2
Ruptured uterus	...	...	(M. 1)	...	1
Following external version	...	...	(M. 1)	...	1
Toxaemia	...	...	(Pr. 1)	...	1
B.B.A.	...	...	(Pr. 1)	...	1
Transverse lie	...	...	(M. 1)	...	1
Multiple pregnancy	...	...	(M. 1 ; Pr. 1)	...	2
Post mature	...	...	(Pr. 1)	...	1
Not known	...	...	(Pr. 3 ; M. 1)	...	4
					42

Circular 20/44, Care of Premature Infants. Notification was received of 270 premature live births. This number included 27 pairs of twins and 1 set of quadruplets.

At the age of six months, 180 of these babies were alive and well and still living in Plymouth.

Seventeen premature babies died within 24 hours of birth, 15 within 7 days, and 20 between 7 and 28 days, making a total of 52 deaths during the first month. Nine died between the age of one and six months (7 from broncho-pneumonia) and one died at the age of nine months from tuberculous meningitis.

The chance of survival of the premature child who survives the first month of life is good. 158 premature babies born in 1946 were surviving and living in Plymouth at the age of six months. By the age of one year, 4 had left Plymouth, and 154 remained alive and well.

Equipment to help with the preservation of life was sent out to seven cases.

Thirteen premature babies born in their own homes were later removed to hospital for special care.

Less than half of the premature births occurred in institutions.

More detailed information is given in the following tables :—

1. INSTITUTIONAL AND DOMICILIARY PREMATURE, OR UNDER-WEIGHT, BABIES.

		<i>Total</i>	<i>Died within 24 hours.</i>	<i>Died within the first week.</i>	<i>Died after the first week and within 28 days.</i>	<i>Survived at end of month.</i>	<i>Died after 28 days.</i>	<i>Left Plymouth between age of 1 and 6 months.</i>	<i>Total surviving and living in Plymouth at 30.6.48.</i>
Institutional Premature Babies ...	123	6	12	15	90	4	24	62	
Domiciliary Premature Babies ...	147	11	3	5	128	6	4	118	
	270	17	15	20	218	10	28	180	

2 CLASSIFICATION OF THE 13 DISTRICT PREMATURE BABIES TRANSFERRED TO HOSPITAL.

<i>No.</i>	<i>Weight</i>	<i>Duration of pregnancy</i>	<i>Remarks</i>
1	4 lbs. 7 ozs.	30 weeks	Feeble infant. <i>Died</i> aged 10 days—Prematurity.
2	4½ lbs.	36 weeks	Flete emergency.
3	5½ lbs.	38 weeks	Illegitimate emergency B.B.A. Flete booking. Transferred to Flete.
4	3 lbs. 10 ozs.	32 weeks	Emergency B.B.A. Flete booking <i>Died</i> aged 19 days—Prematurity.
5	3 lbs.	28 weeks	Mother removed to hospital on account of retained placenta.
6	5 lbs.	8 months	Illegitimate. Removed on account of home conditions.
7	3½ lbs.	28 weeks	No one at home to care for baby.
8	4½ lbs.	37 weeks	Pyrexia and cyanosis
9	4¼ lbs.	35 weeks	Transferred to the Royal Eye Infirmary on account of ophthalmia neonatorum.
10	1½ lbs.	26/28 weeks	Transferred for incubation and special care. <i>Died</i> aged 15 hours—Prematurity.
11	2 lbs. 2 ozs.	28 weeks	Emergency case, and unsatisfactory home conditions. <i>Died</i> aged 10 hours—Prematurity.
12	4½ lbs.	38 weeks	Twin—unsatisfactory home conditions.
13	4¾ lbs.	38 weeks	Twin—unsatisfactory home conditions.

Note.—9 babies survived and 4 babies died.

3. INSTITUTIONAL AND DOMICILIARY PREMATURE BABIES.

PROBABLE CAUSE OF PREMATURITY

(INCLUDING SEVERAL FULL TERM BUT UNDERWEIGHT BABIES).

<i>Probable Cause.</i>	<i>Total Births.</i>	<i>Died within 24 hours.</i>	<i>Died within 28 days.</i>	<i>Died after 28 days.</i>	<i>Left Plymouth between age of 1 and 6 months</i>	<i>Total surviving and living in Plymouth at 30.6.48.</i>
Multiple pregnancy ...	42	3	9	3	6	21
Multiple pregnancy + A.P.H. ...	2	—	1	—	—	1
Multiple pregnancy + hydramnios ...	4	2	—	—	—	2
Multiple pregnancy + toxæmia ...	4	—	1	—	2	1
Toxæmia and pre-eclamptic toxæmia ...	21	—	3	2	5	11
Hypertension ...	1	—	—	—	1	—
Hydramnios ...	1	—	—	—	—	1
A.P.H. (including placenta prævia and lateral placenta prævia) ...	12	4	4	1	1	2
Surgical induction ...	1	—	—	—	—	1
Uterine prolapse ...	1	1	—	—	—	—
Illness of mother (including : associated with cardiac disease, highly strung and nervous, and over-strain) ...	7	—	3	—	—	4
Injury or shock to mother ...	3	—	—	—	—	3
Hormone deficiency ...	1	—	—	—	—	1
Accident ...	1	—	—	—	—	1
Full-term but underweight ...	55	—	1	1	4	49
Full-term but underweight associated with toxæmia ...	2	—	—	—	—	2
Full-term but underweight associated with multiple pregnancy ...	4	—	1	—	—	3
Not known ...	108	7	12	3	9	77
TOTALS ...	270	17	35	10	28	180

4. INITIAL FEEDING OF THE 180 PREMATURE BABIES SURVIVING AND LIVING IN PLYMOUTH AT THE AGE OF SIX MONTHS.

(a) Domiciliary : 118.

Entirely breast fed	...	...	...	...	71
Breast milk + complementary feeding	...			...	21
Artificially fed	...	...	...	...	26
					<hr/>
					118
					<hr/>

Note.—Smallest baby 3 lbs. Largest baby 5½ lbs.

(b) Institutional : 62.

Entirely breast fed	....	...	...	...	23
Breast milk + complementary feeding	...			...	28
Artificially fed	...	...	...	...	7
Not known	...	...	...	...	4
					<hr/>
					62
					<hr/>

Note.—Smallest baby 2 lbs. 14 ozs. Largest baby 5½ lbs.

Infant Mortality. (See Table on page 13, and Chart on page 16e).
Two hundred and twenty-four children under one year of age died giving an *infant mortality rate* of 49.86 per 1,000 live births, compared with the rate of 41 for England and Wales.

There were 127 deaths under the age of one month giving a *neo-natal mortality rate* of 28.28 per 1,000 live births.

Total deaths under 1 week	...	...	...	51
Deaths under one month due to prematurity	...			44
Gastro-enteritis deaths under one month	...			43
Congenital malformation deaths under one month				5
Congenital injury at birth and other diseases of early infancy deaths under one month	...			25

Pre-natal and neo-natal causes account for 41% of the total deaths, respiratory diseases for 26%, diseases of the digestive tract including gastro-enteritis for 25%, and infectious diseases for 2.7%.

Deaths of children between 1 and 5 years.

Number of deaths	36
------------------	-----	-----	-----	----

Nineteen of the 36 deaths were due to infectious diseases, including 11 from tuberculosis.

				<i>Deaths 0-1 years.</i>	<i>Deaths 1-5 years.</i>	<i>Total deaths under 5 years.</i>
1938	...	...	...	176	59	235
1939	...	...	...	145	48	193
1940	...	...	...	197	94	291
1941	...	...	...	178 (27 enemy action)	112 (48 enemy action)	290
1942	...	...	...	146	32	178
1943	...	...	...	118	49	167
1944	...	...	...	139	40	179
1945	...	...	...	214	46	260
1946	...	...	...	197	33	230
1947	...	...	...	221	36	257

Gastro-enteritis in children under two years of age. The total number of deaths under one year was 63 (of which 8 did not belong to Plymouth). 56 died under the age of five weeks (49 by the age of three weeks), and out of that 56, 55 were born in institutions.

The total number of cases notified was 160, (plus 37 un-notified cases), the age at onset being :—

<i>Age at Onset.</i>	<i>No.</i>				
1 week ...	26				
2 weeks ...	32				
3 weeks ...	28				
4 weeks ...	12				
	—	Total under one month	...	...	98
1-3 months ...	21				
3-6 months ...	22				
6-9 months ...	19				
9-12 months ...	15				
	—	Total between one month and one year	...	...	77
		Total under one year (Deaths 63)	...	...	175
		Total 1-2 years (Deaths —)	...	...	22
					197

Ophthalmia Neonatorum.

<i>No. notified</i>	<i>Where confined</i>		<i>Where treated</i>			<i>Vision un- impaired</i>
	<i>Own home</i>	<i>Insti- tution</i>	<i>Own home</i>	<i>Royal Eye Infirmary Out- patient</i>	<i>Out- patient and In- patient</i>	
17	12	5	3	7	7	17

In addition to this, 54 babies not notified as having ophthalmia neonatorum were referred to the Royal Eye Infirmary for treatment of the eyes.

Unfortunately one of these babies developed a marked impairment of vision, treatment being complicated by an attack of broncho-pneumonia. Another died of broncho-pneumonia soon after treatment for the eyes was completed. A third child had to be admitted to the City Hospital with broncho-pneumonia during the course of eye treatment. A fourth child was found to have a congenital opacity of the left eye, but soon after left Plymouth.

Child Life Protection. There is still a much greater demand for foster-mothers than can be met. Under such conditions a relaxation of standards is almost inevitable, though much to be deplored.

The guaranteed payments to foster-mothers' scheme works satisfactorily.

Each Health Visitor acts as the Child Life Protection Officer for her district. Altogether 665 Child Life Protection visits were paid.

FOSTER-PARENTS.			
No. on Register, 1st January, 1947	...	...	31
New registrations during the year	...	...	9
			<hr/> 40
Removals from register during the year	...	...	5
			<hr/> 35
On Register at end of year	...	...	<u>35</u>

FOSTER-CHILDREN.			
No. on Register, 1st January, 1947	...	...	35
Notifications of children received during the year			58
			<hr/> 93
Removals from Register during the year :—			
Adopted	...	...	1
Over 9 years of age	...	...	1
Removed to care of relatives	...	...	33
Removed to official organisations	...	...	2
Removed to outside areas	...	...	1
Removed to other Foster-mothers	...	...	4
			<hr/>
Total removals from Register	...	...	42
			<hr/> 51
On Register at end of the year	...	...	<u>51</u>
Interviews with Mothers and Fathers		...	20
Interviews with Foster-mothers	...	...	131
Home visits by Superintendent Health Visitor	...	...	41

Adoption of Children (Regulation Act, 1939).

Cases brought forward from 1946	...	...	...	41
New cases in 1947	...	...	...	42
				<hr/>
Total on Register for 1947	...	...	...	83
Adoptions completed during 1947	...	...	46	
Adoptions not proceeded with	...	...	8	
No. of children who died during year	...	...	1	
				<hr/>
				55
				<hr/>
Total on Register at end of 1947	...	...	...	28
				<hr/>
Visiting :—				
1st visits	...	...	...	78
Re-visits	...	...	...	316
				<hr/>
Total visits	...	...	...	394
				<hr/>
Interviews by Superintendent Health Visitor	...	...	...	252

Illegitimate Children.

Circular 2866.

Special care has been given to illegitimate children as follows :—

Admitted to our residential nursery	...	...	14
Admitted to day nurseries	...	...	26
Placed with foster-mothers under our guaranteed payments to foster-mothers' scheme	...	...	8
Adoptions :—			
Applications considered	...	...	83
Adoptions completed	...	...	46
For further information, see next section on "Moral Welfare."			

Moral Welfare.

The need for this work is greater than ever, and 1947 has been a busy year for our Moral Welfare

Worker.

Summary of work covered :—

Cases in hand from 1946	...	...	...	35
Cases reported by—				
Maternity and Child Welfare	...	...	157	
Social Workers	...	...	18	
Public Officials	...	...	30	
Themselves and others interested	...	...	42	
				<hr/>
				247
				<hr/>
Cases dealt with	...	...	...	282
				<hr/>
No. of interviews	...	...	...	1731
No. of visits	...	...	...	640
No. of patrols	...	...	...	8
No. of after-care visits at Starcross, Lostwithiel, St. Agnes, Penzance and Newquay	...	...	...	12

Cases were dealt with on the following lines :—

Unmarried mothers helped and advised	80
Married women with illegitimate children helped and advised	54
Matrimonial difficulties	8
Young girls in moral danger sent to six months' Training Home	2
Young Girl in moral danger sent to two year Training Home	1
Taken to Residential Nurseries, etc.	14
Foster homes found through M. & C.W. Dept. ...	8
Adoptions arranged	4
Taken to Maternity Homes	9
Sent to Maternity Homes in their own districts ...	3
Sent to relatives in other towns 2 girls and 2 babies	
Taken to Hostel for temporary shelter	6
Taken to Hostel for expectant unmarried mothers	6
Taken to Mothercraft Hostel 10 girls and 11 babies	
Taken to Ford House	2
Hostel accommodation for working girl	1
Taken to Mental Institution	1
Residential work found with baby	1
Work found for	35
Put in touch with Social Workers in other towns ...	5
Put in touch with Mental Welfare	3
Stranded girls returned to homes in other towns ...	3
Affiliation Orders obtained through private agreements	3
Affiliation Orders obtained through the Court ...	2
Grants, Allowances, etc., administered for ...	45
Boarding out Grants obtained	14
Young married woman in moral danger sent home to another town	1
Prams. loaned to	9
Sent to Hostel in Cornwall to await confinement ...	1

In addition to this, gifts of baby clothes, prams., cots, books, etc., were given where required.

The Moral Welfare Officer has submitted the following comments on various aspects of her work.

“ A problem which is causing much anxiety is that of a mother of a large family (some of its members grown up) having illegitimate children. In a number of cases, young girls have come to us for help in tracing the putative father, and it has been discovered that he is the husband of a woman we have also helped. In several instances, the children of these parents are out of control and in the hands of the Police.

Another difficulty has been that of girls coming into Plymouth from other towns a short time before their confinement. They are anxious to have their babies taken from them immediately they are born, in order that they may return home as soon as possible. In some instances it has been possible to persuade the girl to keep her baby. In three cases the girls have been sent to Maternity Homes in their own districts, and ultimately the parents have forgiven the girl and accepted her into the family again.

In other instances, parents have been contacted and arrangements have been made for them to take their daughters home straight out of hospital.

We are greatly indebted to Dr. Barnardo's, who are at the moment making boarding-out grants to over 30 girls. The sums involved amount to about £60 per month. These grants are given to encourage girls to keep their babies and to help with the responsibility which in many cases the girl has to carry alone. We administer, in various ways, about £850 a year.

It is of the greatest importance that girls returning from Maternity Homes should be kept in close touch, also girls who we are afraid may drift into bad company. It is felt that so much more can be done for them away from the "office atmosphere," and we are most grateful for having been given a Nissen Hut where they can meet in a homely way. It may be added that they appreciate this tremendously.

Although it has not been possible to patrol the streets a great deal, there is a great need for this work."

Health Visiting. There were sixteen Health Visitors on the staff on December 31st with a known case load of 17,006 children under five (4,196 being under one year), which is too high for satisfactory work.

Summary of visits paid during the year :—

Births	...	...	...	...	...	...	4,414
1st year visits	..	...	...	...	...	...	11,100
1st visits, 1-5 years	...	...	...	...	...	...	1,020
Re-visits, 1-5 years	...	...	...	...	...	...	18,784
1st ante-natal visits	...	...	...	...	...	...	765
Re-ante-natal visits	...	...	...	...	...	...	664
Visits re infectious diseases	...	...	...	...	...	...	191
Child Life Protection visits	...	...	...	...	...	...	665
Visits re adoption	...	...	...	...	...	...	394
Special visits	...	...	...	...	...	...	1,753
							<hr/> 39,750 <hr/>

The 191 visits in connection with infectious diseases are made up as follows :—

Ophthalmia neonatorum	...	...	...	...	17
Discharging eyes	...	...	...	...	9
Whooping cough	...	...	...	...	11
Measles	...	...	...	...	8
Chicken pox	...	...	...	...	1
Enteritis	...	...	...	...	130
Cerebro-spinal meningitis	...	...	...	...	3
Tuberculous meningitis	...	...	...	...	1
Poliomyelitis	...	...	...	...	11
					<hr/> 191 <hr/>

Two hundred and ninety-eight sanitary defects were reported by Health Visitors, and 155 visits were paid in connection with the Home Help service.

Child Welfare Centres. An additional baby session was started at St. Budeaux in July, bringing the total number of weekly sessions up to fourteen.

There was considerable overcrowding at several other centres at certain times of the year. Additional sessions were needed, but not possible because of general staffing difficulties.

See Table on page 34a for a summary of work done.

The crèche at Beacon Park, staffed by voluntary workers, remained open throughout the year.

No. of sessions	...	...	...	...	45
No. of children attending	...	...	...	...	662
Average attendance per session	...	...	...	...	15

Observation Play Circle. For many years, one session weekly has been held at Beaumont Centre, and we are very much indebted to Mrs. Hamley, a trained social worker with experience of psychiatric work, who gives her services free, and does excellent work.

Children are referred from any of our Maternity and Child Welfare Centres by the medical officer in charge, and the causes for reference have included all the usual difficulties of the pre-school child and its parents.

Mrs. Hamley reports as follows :—

“ Outstanding have been the numbers of tiny tots referred for ‘ nerves ’—usually due to undue pressure by the grown-ups often caused by cramped and deplorable housing conditions. In these cases the mother has been helped to ‘ adjust ’ her own state of mind for the sake of the little one, and encouragement given to find new ways of freedom and ease for the toddler and family as best she can until such time as she has better accommodation.”

Food Advice Service. Our very competent full-time demonstrator, lent by the Education Authority, retired in August, 1947, and what had become a much appreciated service suddenly ceased.

Since then, however, we have been indebted to the Ministry of Food for a series of demonstrations at various centres.

Dental Treatment. The following is a summary of the work done during 1947 :—

Children—

Fillings ...	...	...	...	...	...	...	65
Extractions ...	...	...	...	...	...	...	298
Treatment of gums ...	...	...	...	...	...	...	4

No payment was made in respect of the above treatment.

Nursing and expectant mothers—

Fillings ...	...	...	...	...	...	...	194
Extractions ...	...	...	...	...	...	...	445
Dentures ...	...	...	...	...	...	...	67
Denture repairs ...	...	...	...	...	...	...	12
Scalings ...	...	...	...	...	...	...	70

One hundred and thirty-nine patients completed treatment, and of these 103 paid the whole cost of treatment, 28 part cost and 8 had free treatment.

Orthopaedic Treatment. Child Welfare medical officers refer cases to the visiting Orthopædic Surgeon at the Mount Gold Orthopædic Hospital, and arrangements are then made for the prescribed treatment to be carried out.

During 1947, 106 cases were referred, 4 of which received in-patient treatment.

CHILD WELFARE CENTRES.

	Town Hall.	Beaumont Hut.	Devonport Park.	Beacon Park.	Peeverell.	Honicknowle.	St. Budeaux.	Efford.	Crownhill.	Totals.
No. of sessions held ...	51	206	51	100	50	48	76	50	53	685
No. of babies entered on register ...	392 (298 1st)	1360 (954 1st)	377 (287 1st)	555 (388 1st)	261 (164 1st)	155 (98 1st)	423 (316 1st)	219 (136 1st)	192 (136 1st)	3934 (2777 1st)
No. of children entered on register ...	198 (65 1st)	756 (177 1st)	171 (79 1st)	333 (177 1st)	133 (29 1st)	142 (68 1st)	194 (93 1st)	274 (75 1st)	154 (80 1st)	2355 (843 1st)
Total ...	590 (363 1st)	2116 (1131 1st)	548 (366 1st)	888 (565 1st)	394 (193 1st)	297 (166 1st)	617 (409 1st)	493 (211 1st)	346 (216 1st)	6289 (3620 1st)
No. remaining on register 31st December, 1947 ...										
Babies ...	213	735	367	311	113	129	258	123	144	2393
Children ...	331	1245	154	529	243	154	329	297	167	3449
Total ...	544	1980	521	840	356	283	587	420	311	5842
No. of babies weighed and mothers advised ...	2732	13120	2791	5776	2130	1246	4124	1271	1642	34832
No. of children weighed and mothers advised ...	809	2971	594	1750	448	513	646	733	646	9110
Total ...	3541	16091	3385	7526	2578	1759	4770	2004	2288	43942
Doctors' consultations ...	1039	4573	1300	2098	573	720	1562	843	627	13335
Average attendances per session ...	70	78.1	66.3	75	51.9	36.6	62.8	39.9	43.1	64.1
Dressings done ...	260	735	282	603	120	55	147	66	82	2350
Attendances at clinics by Health Visitors ...										3,766
Diphtheria Immunisation No. 1st attendances ...	238	822	383	432	—	*8	388	173	207	2651
No. re-attendances ...	364	1446	521	637	—	*3	546	232	298	4047

* Commenced December, 1947.

Ultra-Violet Light Clinics.

A morning session has been held twice weekly throughout the year at the Town Hall, Stonehouse.

Before the war, four light sessions were held every week, and as soon as staffing difficulties permit, additional sessions will be resumed and the scope of the work extended.

There is no doubt that the majority of the children who attend derive a considerable amount of benefit from the treatment.

No. of sessions	...	...	...	...	...	102
1st attendances	...	...	...	...	...	164
Transfers from 1946	...	...	...	...	...	45
Re-attendances	...	...	...	...	...	2834
						<u>3043</u>
Average attendance	...	...	...	...	...	29.83

Treatment was given for :—

Rickets: 18 cases.

Cured or much improved	...	...	...	...	13
Defaulters	...	...	...	...	5
					<u>18</u>

General debility and sub-nutrition: 109 cases.

Improved	...	...	...	...	...	78
No benefit	...	...	...	...	...	2
Defaulters	...	...	...	...	...	29
						<u>109</u>

Skins: 21 cases.

Infantile excema : 13 cases.

Improved	...	...	11
Defaulters	...	...	2

Alopecia, 3 cases, all improved (1 adult).

Impetigo, 1 case, cured.

Boils, 1 case, cured.

Chilblains, 2 cases, improved.

Burn of face, 1 case, scar much improved.

Tuberculous adenitis of neck: 6 cases.

Improved	...	...	...	...	...	...	4
No benefit	...	...	...	...	...	...	1
Defaulter	...	...	...	...	...	...	1
							<hr/>
							6
							<hr/>

Non-tuberculous adenitis of neck: 2 cases, both improved.

Respiratory conditions: 26 cases.

Bronchial catarrh, 6 cases, improved.

Frequent colds, 20 cases.

Improved	...	...	15
No improvement	...	...	1
Defaulters	...	...	4

Debility following acute illness: 9 cases.

Improved	...	...	...	...	...	...	8
No benefit	...	...	...	...	...	...	1
							<hr/>
							9
							<hr/>

Asthma: 1 case, improved.

Mentally backward: 4 cases, general physical improvement.

Miscellaneous: 13 cases.

Number of sessions held weekly : 16.
See table for summary of attendances.

ANTE-NATAL CENTRES.

	Town Hall.	Beaumont Park.	Devonport Park.	Beacon Park.	St. Budeaux	Efford.	Crownhill	Totals.
No. of sessions held	...	...	...	...	...	...	...	...
1st attendances { Pr.	102	301	101	92	101	52	53	802
{ M.	137	458	120	122	67	34	20	958
{ N.P.	211	550	199	181	187	101	83	1512
Re-attendances	16	36	10	13	6	6	6	93
{ 1st	1478	4220	1288	1308	1168	578	324	10364
Post-natal attendances { re-	5	9	—	—	—	1	2	17
{ 1st	—	2	—	—	—	—	—	2
Miscellaneous { re-	16	8	16	1	—	26	24	91
{ re- ...	7	4	—	1	—	2	—	14
Total attendances { 1st	385	1061	345	317	260	168	135	2671
{ re-	1485	4226	1288	1309	1168	580	324	10380
Average per session	18	17.5	16	17.6	14	14	8.6	16.2
Consultations	1827	3418	817	1580	1375	722	426	10165
No. of transfers from 1946	122	319	132	121	89	49	11	843
Total No. of women attending during 1947 { A.N.	486	1363	461	437	349	190	120	3406
{ P.N.	—	—	—	—	—	—	—	—
{ Misc.	21	17	16	1	—	27	26	108
	507	1380	477	438	349	217	146	3514

Three thousand, four hundred and six expectant mothers attended municipal ante-natal clinics, the average attendance per session being 16.2.

Two thousand, two hundred and eighty-eight of these expectant mothers were confined during the year.

No. confined in 1947	...	...	...	...	2,288*
No. aborted in 1947	...	...	...	...	52
No. of above confined in City Hospital	...	...	...	...	526
No. confined at Flete	...	...	...	...	651
No. confined T.T.N.A. District Midwife	...	...	...	...	65
No. confined Alexandra Maternity Home	...	...	...	...	47
No. confined Municipal Midwife	...	...	...	...	985
No. confined Private Midwife	...	...	...	...	7
No. confined Military Families' Hospital	...	...	...	...	3
No. confined Prince of Wales' Hospital	...	...	...	...	1
No. confined Private Nursing Home	...	...	...	...	1
No. left Plymouth	...	...	...	...	140

* Includes 38 stillbirths.

Character of labour in 2,288 confinements :—

Spontaneous	...	...	...	...	...	2,133
Instrumental	...	...	...	...	...	88
Cæsarean	...	...	...	...	...	41
Induction	...	...	...	...	...	21
Bimanual	...	...	...	...	...	3
Not known	...	...	...	...	...	2

The following abnormalities were found in cases attending for the first time in 1947 :—

1. Contracted pelvis :—						
Minor	...	...	...	...	...	6
Major	...	...	...	...	...	2
2. Albuminuria	...	...	...	...	...	33
3. Eclampsia	...	...	...	...	...	2
4. Toxaemia	...	...	...	...	...	13
5. Syphilis	...	...	...	...	...	16
6. Gonorrhoea	...	...	...	...	...	1
7. Cardiac diseases	...	...	...	...	...	33
8. Respiratory diseases	...	...	...	...	...	24
9. Carious teeth	...	...	...	...	...	420
10. Profuse leucorrhoea	...	...	...	...	...	27
11. Severe digestive disturbance	...	...	...	...	...	8
12. Subnutrition	...	...	...	...	...	12
13. Anaemia	...	...	...	...	...	89

Routine Wassermann tests have been done at our ante-natal clinics since April, 1943, with the following results :—

					No. done.	No. positive.
1943	...	...	...	...	825	5
1944	...	...	...	...	1001	16
1945	...	...	...	...	774	7
1946	...	...	...	...	376	1
1947	...	...	...	...	1109	9 i.e. 0.81%

Post-Natal. Midwives' district cases attending our ante-natal centres have been referred, throughout the year, to the City Hospital for their post-natal examination six weeks after confinement.

A special appointment was made for 1,256 women, but only 203 women accepted and attended.

Probably many more would attend if facilities for this examination were provided at each of our Welfare Centres.

Flete Maternity Home.	Plymouth mothers confined at Flete during						
	1947	...	...	...	...	...	645
	Devon County mothers confined at Flete						
	during 1947	...	...	...	...	...	24
	Cornwall County mother confined at Flete						
	during 1947	...	...	...	...	...	1
							<hr/>
							670
							<hr/>

Fees paid in advance at Maternity and Child Welfare Office
during 1947 £2,992 13s. 3d.

Home Help Service. The combined home and domestic help service developed rapidly and continued to function within the Maternity and Child Welfare Department without an organiser. An outbreak of gastro-enteritis and the subsequent closing of certain maternity wards in the city created an increased demand for home helps. This emergency was fully covered, and 45 full- or part-time helpers were at times on the register as "effective" for duty. On the 31st December, 1947, 30 helpers were employed.

No difficulty in recruiting was experienced ; the present high cost of living has re-opened the old field of supply, namely the housewife who has to supplement the family income.

Health Visitors paid 246 visits in connection with this service.

	<i>Home Help.</i>	<i>Domestic Help.</i>	<i>Total.</i>
No. of full-time cases ...	130	55	185
No. of part-time cases ...	56	57	113
	<u>186</u>	<u>112</u>	<u>298</u>
	£ s. d.	£ s. d.	£ s. d.
Wages and overhead (1s. 8d. per hour) ...	1596 18 0	1829 10 0	3426 8 0
Amount recoverable ...	495 1 1	522 8 6	1017 9 7
COST ...	<u>£1101 16 11</u>	<u>£1307 1 6</u>	<u>£2408 18 5</u>

Supervision of Midwives.	Number notifying their intention to practise	67
	On Register at end of year ...	67
		<u>67</u>
	Municipal (including Non-Medical Supervisor of Midwives) ...	21
	In private practice ...	6
	T.T.N.A. ...	19
	Alexandra Maternity Home ...	16
	City Hospital ...	5
		<u>67</u>

No. of cases attended by private midwives :—

One midwife had 70 cases, one had 58, one had 28, one had 14 cases, and two had 1 case.

Approximately 70.7% of the notified births (district and institutional) were conducted by midwives only.

District cases attended by midwife ...	1,626
District cases attended by midwife acting as maternity nurse ...	623
*Institutional cases attended by midwife ...	1,398
*Institutional cases attended by midwife acting as maternity nurse ...	631
	<u>4,278</u>

* Includes maternity and nursing homes and hospitals.

Medical help was sought by midwives in 958 cases, approximately 118 calls being for the child.

The following are the reasons given for seeking medical aid :—

Toxaemia of pregnancy	...	45	Triplet pregnancy	...	...	1
Essential hypertension	...	6	Twin pregnancy	...	...	1
Hyperemesis	...	6	Still birth	...	...	3
Albuminuria	...	2	Unsatisfactory condition of the			
Oedema	...	2	mother :—			
Hydramnios	...	2	Ante-natal	...	...	7
Fit	...	1	Post-natal	...	...	9
Urinary infection	...	1	Placenta praevia	...	...	1
Contracted pelvis	...	2	Adherent placenta	...	...	15
Malpresentation	...	9	Retained membranes	...	...	2
Occipito-posterior	...	1	Painful breast	...	...	6
Disproportion	...	27	Ruptured perineum	...	...	335
Patient's request	...	5	Episiotomy	...	...	37
Foetal distress	...	16	Recent repair	...	...	2
Maternal distress	...	2	Pain in leg	...	...	7
Haemorrhage :—			Rise of temperature	...	...	37
Ante-partum (undefined)	...	23	Abdominal pains	...	...	3
Post-partum	...	17	Skin condition of mother	...	...	1
Intra-partum	...	3	Skin condition of baby	...	...	1
Prolonged labour	...	134	Deformity of baby	...	...	1
Premature labour	...	4	Feeble infant	...	...	37
Premature rupture of mem-			Discharging eyes	...	...	30
branes	...	3	Jaundice	...	...	1
Breech	...	21	Convulsions	...	...	3
Prolapsed cord	...	4	Unsatisfactory condition of the			
Uterine inertia	...	8	baby	...	...	45
Miscarriage	...	4				
Threatened abortion	...	21				958
Post-maturity	...	3				
Varicose veins	...	1				

It is remarkable how little the proportionate number of medical aids for each cause varies from year to year.

This year there is a definite decrease in the number of medical aids for toxaemia of pregnancy.

Other notifications received from midwives under Central Midwives Board rules :—

Notification of artificial feeding	...	...	...	185
Notification of still birth	...	...	...	13
Notification of death	...	...	...	13
Notification of having laid out a dead body	...	...	...	15
Notification of liability to be a source of infection	...	...	...	11

Municipal Domiciliary Midwifery Service. Municipal midwives attended 200 more deliveries than in 1946. In addition, there were times when we were unable to cope with our total number of cases and the assistance of the Three Towns Nursing Association had to be obtained.

No small measure of thanks and praise is due to our midwives who carried on and maintained their high standard of work despite all the strain caused by prolonged understaffing as, in addition to our shortage of staff, two midwives were off sick for three months.

The granting of a car allowance from April, 1947, to those midwives who had cars or who are able to get them, has proved of immense value to the work. Seven midwives now run cars, and others are awaiting delivery.

Midwifery work in Plymouth and on the new estates is still on the increase.

Unfortunately the shortage of staff for this work remains persistent.

At the end of 1947, there were seventeen midwives on the staff, plus one Non-Medical Supervisor of Midwives.

The following is a summary of the work done during the year :—

Number of cases attended :—					
Midwife only	...	...	...	1,192	
Midwife with Doctor	...	...	...	235	
					<hr/>
					1,427
Number of cases attended by relief nurses :—					
Midwife only	...	...	...	...	1
					<hr/>
					1,428
					<hr/>
Number of cases booked	...	...	...	...	1,615
Number of ante-natal visits paid by midwives	...	...	...	...	7,208
Number of ante-natal clinic visits paid by midwives	...	...	...	...	139
Number of emergency deliveries transferred to Flete	...	...	...	...	4
Number of patients transferred to the City Hospital for confinement	...	...	...	...	28
Number of patients transferred to the City Hospital after confinement (including 5 emergencies)	...	...	...	...	15
Number transferred to the Royal Eye Infirmary after confinement	...	...	...	...	4
Number of emergency deliveries	...	...	...	...	50
Number of emergency miscarriages (including 1 transferred to the City Hospital)	...	...	...	...	3
Number of booked miscarriages (including 1 transferred to the Prince of Wales' Hospital)	...	...	...	...	6
Number of patients booked for the administration of Gas and Air Analgesia	...	...	...	...	234
Number of Gas and Air administrations	...	...	...	...	127

Amount of fees collected	...	...	£3,265	7s.	10d.
			£	s.	d.
Midwifery fees	...	2,621	6	0	
Maternity fees	...	581	5	0	
Sets and Pads	...	62	16	10	
		£3,265	7	10	

Number of accouchement sets sold	...	145
Number of maternity pads sold	...	87 packets.

Fees to be collected by City Treasurer ... £1,053 5s. 6d.

Fees paid to Doctors. Three hundred and seventy-five accounts were dealt with under Section 14 of the Midwives Act, 1918.

In respect of 59 of these doctors' accounts, the full fee was paid by the Local Supervising Authority without recovery. In 294 cases the full fee, and in 43 cases half the fee, was recoverable in accordance with the assessment scale of payment according to income, as fixed by the City Council.

		£	s.	d.
Amount paid to doctors	...	643	1	0
Amount recoverable	...	504	3	0
		£138	18	0

Maternity and Nursing Homes.

MATERNITY HOMES.

On Register, 1st January, 1947	...	...	...	1
Closed during the year	...	...	...	—
On Register at the end of year	...	...	...	1

NURSING HOMES.

On Register, 1st January, 1947	...	...	...	2
Closed during the year	...	...	...	—
On Register at the end of the year	...	...	...	2

Maternal Mortality. Five women died in Plymouth from causes attributable to childbirth. Two of these deaths were outward transfers, leaving three accountable to Plymouth.

The Maternal Mortality rate is therefore 0.65 per 1,000 births, which is the lowest on record for this city.

There were no deaths from abortion.

DEATHS DUE TO PREGNANCY AND CHILDBIRTH, 5

(Belonging to Plymouth, 3).

CAUSES.

Dystocia	...	...	...	...	...	...	1
Obstetric shock	...	...	...	...	...	...	2
Pulmonary embolism	...	...	...	...	...	...	1
Post partum eclampsia	...	...	...	...	...	...	1
							<hr/> 5
							<hr/> <hr/> 5

WHERE CONFINED.

Own home	...	...	...	...	...	...	1
Own home + City Hospital	...	...	...	...	...	...	2
Alexandra Maternity Home	...	...	...	...	...	...	2
							<hr/> 5
							<hr/> <hr/> 5

CHARACTER OF LABOUR.

Failed forceps, craniotomy	...	...	...	...	...	...	1
P.O.P. rotated, P.P.H.	...	...	...	...	...	...	1
Forceps	...	...	...	...	...	...	1
Quadruplets	...	...	...	...	...	...	1
Manual extraction of breech	...	...	...	...	...	...	1
							<hr/> 5
							<hr/> <hr/> 5

DURATION OF PREGNANCY.

40 weeks	...	...	...	...	...	...	4
30 weeks	...	...	...	...	...	...	1
							<hr/> 5
							<hr/> <hr/> 5

AGE.

25-29 years	...	...	...	...	...	...	3
30-34 years	...	...	...	...	...	...	1
35-39 years	...	...	...	...	...	...	1
							<hr/> 5
							<hr/> <hr/> 5

PARITY.

1st pregnancy	...	...	...	...	...	...	4
5th pregnancy	...	...	...	...	...	...	1
							<hr/> 5
							<hr/> <hr/> 5

HOME CONDITIONS.

Comfortable	...	...	...	...	...	...	3
Fair	...	...	...	...	...	...	2
							<hr/> 5
							<hr/> <hr/> 5

ANTE-NATAL SUPERVISION.

Satisfactory	...	...	...	...	...	...	3
Inadequate	...	...	...	...	...	...	2
							<hr/> 5
							<hr/> <hr/> 5

PLACE OF DEATH.

City Hospital	...	...	...	...	...	...	3
Alexandra Maternity Home	...	...	...	...	...	...	2
							<hr/> 5
							<hr/> <hr/> 5

TOTAL PUERPERAL MORTALITY.

Year	ENGLAND AND WALES			PLYMOUTH		
	Per 1,000 live births	Per 1,000 total births		Per 1,000 live births	Per 1,000 total births	
		Including abortions	Excluding abortions		Including abortions	Excluding atortions
1928	4.42	4.25	—	6.04	—	—
1929	4.33	4.16	—	4.98	—	—
1930	4.40	4.22	—	6.43	—	—
1931	4.11	3.94	—	—	2.81	—
1932	4.21	4.04	—	—	5.58	—
1933	4.51	4.32	—	—	5.95	—
1934	4.60	4.42	—	—	4.2	—
1935	4.10	3.93	—	—	5.01	—
1936	3.81	3.65	—	—	2.82	—
1937	3.23	3.11	—	—	5.3	—
1938	3.08	2.97	—	—	2.03	—
1939	2.93	2.82	—	—	3.07	—
1940	—	2.6	2.16	—	3.8	3.2
1941	—	2.76	2.23	—	2.10	1.26
1942	—	2.17	1.01	—	3.44	3.09
1943	—	2.29	1.84	—	3.6	2.7
1944	—	1.93	1.53	—	2.79	2.24
1945	—	1.79	1.44	—	4.32	3.56
1946	—	1.43	1.24	—	1.36	1.36
1947	—	1.17	1.01	—	0.65	0.65

Puerperal
Pyrexia.

Total notifications, 37 ; belonging to Plymouth,
31.

Rate per 1,000 total births, 6.7. (England and Wales, 7.16).

<i>Year.</i>	<i>No. of cases notified. P.P.</i>
1938	67
1939	48
1940	59
1941	39
1942	29
1943	41
1944	49
1945	36
1946	77
1947	37

PLACE OF CONFINEMENT.

Own home	15
City Hospital	14
Flete Maternity Home	1
Alexandra Maternity Home	5
Military Families' Hospital	1
Nursing Home	1

37

CAUSE OF PYREXIA.

Sepsis (mild 6 ; septicaemia 1)	19
Pyelitis and urinary tract infection	7
Thrombosed veins of leg	3
Mastitis	1
Broncho-pneumonia after Caesarean Section	1
Pleurisy	1
Acute pulmonary tuberculosis	1
Influenza	2
Not known	2

37

Day Nurseries. Our two day nurseries ran to capacity throughout the year and accomplished much sound, constructive work, whilst carrying on their day-to-day activities.

The health of the children improved very noticeably after a stay in the nursery, good food, regular rest, a happy atmosphere, with always lots of interesting things to do, providing the right medium for the proper development of mind and body.

Attendances in both nurseries were adversely affected by an outbreak of measles.

HOE STREET. Accommodates 40 children.

No. of children admitted during the year ...	44
No. of children discharged during the year ...	43
Average daily attendance	29

NELSON GARDENS. Accommodates 45 children.

No. of children admitted during the year ...	46
No. of children discharged during the year ...	40
Average daily attendance	33

Queen's Gate Residential Children's Nursery. Our residential nursery accommodation has proved quite inadequate to meet the demands made upon it, and many who genuinely needed help have been unable to obtain it.

It has been quite impossible to reserve in advance any short stay accommodation—such as is needed by some mothers at the time of their confinement.

The nursery has been consistently overcrowded especially on the under two side, and this has meant many periods of considerable stress and strain for the superintendent and senior staff.

Twelve children who would normally have been admitted to Queen's Gate were of necessity diverted to Langdon Court Convalescent Home.

	<i>Under 2 years.</i>	<i>Over 2 years.</i>	<i>Total.</i>
No. admitted during the year :—			
Court order	1	3	4
Relieving Officer's order	8	4	12
N.S.P.C.C.	4	4	8
Others	20	7	27
	33	18	51
No. discharged during the year :—			
Boarded out	1	2	3
Dr. Barnardo's Home	—	1	1
Royal Dockyard Orphanage	—	1	1
Poor Law Institute, Barnstaple	1	1	2
Transferred Langdon Court	4	2	6
Others	20	13	33
	26	20	46
No. in residence 31.12.47	16	23	39

Nursery Students. The arrangements for training have functioned satisfactorily, and in the autumn, sixteen first-year students were taken on, making a total of thirty-two, i.e. sixteen first-year and sixteen second-year students.

Mothers Advice Centre A weekly afternoon session is held by a voluntary organisation at our Beaumont Hut Centre.

No. of clinics held	52
No. of clinics Doctor present	45
New cases	282
(Sent by Health Authority, 41)	
No. of return visits	771
No. dealt with by post	411
	1,182

Sanitary Circumstances of the Area

REPORT OF THE CHIEF SANITARY INSPECTOR.

MR. C. E. SANDERSON.

Water Supply. I am indebted to the City Water Engineer for the following report:—

The latter part of the year [was extremely dry, and at one stage the water in store was depleted to the extent that only a fortnight's supply remained in the reservoir. The supply was restricted to essential needs only, and the use of water for fountains, gardens, washing cars and the swilling of pavements was prohibited from the 27th August to the 22nd November. The quality of the water has been satisfactory.

Plumbo-solvency. A few samples have shown a tendency towards plumbo-solvency and the lime dosage has been increased from 4 to 6 cwts. per day. At present the lime is added by hand, but an automatic lime dosing apparatus has been purchased and is now being installed.

The samples referred to were taken on the 23rd September. One from a supply derived from Roborough Reservoir showed 1/30 grain per gallon of lead and another from King's Tamerton Reservoir 1/70 grain per gallon.

A sample of water from Roborough Reservoir inlet well was submitted for analysis on the 23rd October and was found to contain 0.9 p.p.m. of lead after 48 hours contact with clean lead.

It is unusual for the water in Plymouth to dissolve lead in these quantities, even without the addition of lime. It is thought that the explanation lies in the increased organic content of the water in the hot dry weather which also caused an increase in the colour of the water.

Sterilization. Chlorine gas has been added to the main supply continuously with an average dose of 1.5 p.p.m.

The Yelverton supply has been treated with conchlor, the dose being between .75 and 1.0 p.p.m.

Estimated population supplied. 195,000 plus service personnel in service establishments.

Chemical Analysis

Eighteen samples of water were submitted for chemical analysis. The following table gives a representative summary of the results of samples sent for chemical analysis, the figures representing parts per 100,000 :—

	<i>March</i>	<i>June</i>	<i>September</i>	<i>December</i>
Temporary Hardness ...	1.0	1.2	0.2	0.6
Permanent Hardness ...	3.8	2.4	2.4	1.6
Total Hardness ...	4.8	3.6	2.6	2.2
Chlorides as Chlorine ...	1.5	1.3	1.5	1.3
Ammonia free and saline as nitrogen ...	0.002	Nil	Nil	0.0024
Ammonia, albuminoid as nitrogen ...	0.006	0.007	0.014	0.0028
Nitrates as nitrogen ...	0.2	0.016	0.03	0.032
Nitrites as nitrogen ...	Nil	Nil	Nil	Nil
Oxygen (absorbed 3 hrs. at 37°C.)	0.176	0.16	0.14	0.048
Metals (zinc, copper and lead) ...	Not Detected	Not Detected	Lead Present to the extent of approx. 1/30 gr. per Gallon	Not Detected
pH value ...	6.7	6.7	6.6	6.4

Bacteriological Examination of Water.

Four hundred and sixty-five samples of water were submitted for bacteriological examination, a summary of results being shown in the following table :—

SAMPLES OF WATER SUBMITTED FOR BACTERIOLOGICAL EXAMINATION DURING 1947

<i>Source</i>	<i>Samples submitted to the Prince of Wales's Hospital Laboratory</i>			<i>Samples submitted to the County Bacteriologist, Exeter</i>		
	<i>Total No. Samples</i>	<i>B. Coli present in 100 ml.</i>	<i>B. Coli absent in 100 ml.</i>	<i>Total No. Samples</i>	<i>B. Coli present in 100 ml.</i>	<i>B. Coli absent in 100 ml.</i>
From premises inside the City supplied by the City mains	337	103	234	72	24	48
From Bathing Pools inside the City	38	18	20	—	—	—
From wells and springs used for drinking water in the City	2	1	1	2	1	1
From premises outside the City supplied by the City mains	5	3	2	—	—	—
From wells, springs, etc., outside the City used for drinking water	4	2	2	4	3	1
From mains supply prior to Chlorinisation (Raw Water)	1	1	—	—	—	—
GRAND TOTALS	387	128	259	78	28	50

SANITARY INSPECTION OF THE AREA

Complaints received.

The number of complaints of nuisances and housing defects continued to increase, the following table showing the extent of the increase in the number of complaints during the past five years :—

<i>Year</i>	1943	1944	1945	1946	1947
Number of complaints received	1319	1704	1916	2658	2856

Prosecutions.

In nineteen cases it was necessary to issue summonses against persons for non-compliance with Abatement Notices. Eight of these summonses were withdrawn, the nuisances having been abated before the date of hearing, and two were adjourned *sine die*. Nine Nuisance Orders were made by the Court, all of which were complied with.

**Result of
Service of
Notices.**

The nature and extent of nuisances abated and works executed are as follows :—

SHOPS ACT.

Seats provided or renewed	1
Ventilation provided or improved	1
Sanitary conveniences provided	1
Washing facilities provided	2
Facilities provided for meals	1

HOUSES :

Walls repaired	137
Outside plastering repaired	435
Inside plastering repaired	596
Damp-proof courses inserted	1
Floors renewed or repaired	238
Floors ventilated	28
Roofs renewed or repaired	1063
Chutes, downpipes or gutters renewed or repaired	513
Chimneys repaired	127
Ceilings repaired	358
Doors and frames repaired	123
Lighting and ventilation of rooms improved ...	10
Window frames or sashes renewed or repaired ...	393
Window cords renewed	203
Staircases repaired	23
Grates or ovens repaired or renewed	164
Boilers provided or repaired	43
Food stores provided or improved	9
Wash-houses provided or improved	21
Outbuildings repaired... ..	6
Obstructive outbuildings, buildings demolished ...	5
Walls or ceilings cleansed and redecorated ...	146
Bedding cleansed or destroyed	5
Yard paving relaid or repaired	52
Nuisances from animals abated	11
Accumulations removed	143
Ash bins provided	175
Water supply provided	13
Water taps or pipes repaired	163
Water samples taken for analysis	447
Miscellaneous repairs and nuisances abated ...	403
Entries inserted in rent books	2

DRAINAGE :

Drains tested, smoke	87
Drains tested, Chemical	8
New drains constructed	20
Drains relaid	54
Drains repaired	95
Drains cleansed	388
Inspection or intercepting chambers provided ...	19
Inspection or intercepting chambers repaired ...	17
Intercepting traps fixed	9
Soil pipes or ventilating shafts fixed or repaired	27
Rainwater pipes disconnected	4
Gullies fixed	25
Troughs provided	24
Troughs trapped or waste pipes repaired	81
Bath wastes trapped or repaired	12
Lavatory basins trapped or waste pipes repaired	11

PREMISES INSPECTED The following table shows the number of inspections of various premises carried out during the year together with the number of Notices served.

Premises Inspected	Inspections or Visits	Intimation Notices served or Improvements required	Intimation Notices complied with or Improvements effected	Statutory Notices served during the year	Statutory Notices complied with during the year
Houses inspected (Public Health Act and Housing Act)	6590	3449	—	—	—
Houses re-inspected (Public Health Act and Housing Act)	17852	262	3042	746	597
No. of premises (other than houses) inspected for nuisances	245	50	28	—	—
No. of visits to prospective Council tenants	1915	—	—	—	—
No. of owners or contractors interviewed	923	—	—	—	—
No. of houses visited <i>re</i> contacts of infectious diseases	49	—	—	—	—
No. of houses visited <i>re</i> notifiable diseases	257	—	—	—	—
No. of houses visited <i>re</i> other diseases	4	—	—	—	—
Accumulations	84	19	24	1	—
Butchers and food factories	1203	3	2	—	—
Cinemas and amusement places	4	—	—	—	—
Common lodging-houses	23	3	3	—	—
Cowsheds	55	2	—	—	—
Dairies and milkshops	389	—	—	—	—
Fresh fish shops	22	3	3	—	1
Fried fish and chip shops	40	7	5	—	—
Ice-cream premises	391	—	1	—	—
Knackers' yards	8	—	—	—	—
Milk vehicles	53	—	—	—	—
Offensive trades	17	1	—	—	—
Offices	3	—	—	—	—
Premises to examine foodstuffs	845	12	—	1	—
Provision shops	87	11	5	—	—
Public conveniences	600	142	117	—	—
Public houses	358	79	20	3	1
Restaurants and restaurant kitchens	411	50	26	1	—
Schools	2	—	—	—	—
Smoke observations	36	1	—	—	—
Stables	3	2	—	—	—
Swimming baths	22	—	—	—	—
Tents, vans and sheds	5	—	1	—	—
Tips	6	—	—	—	—
Water courses	8	2	—	—	—
Houses inspected for rat infestation	904	274	—	—	—
Houses re-inspected for rat infestation	483	2	211	—	—
Premises other than houses inspected for rat infestation	232	65	—	—	—
Premises other than houses re-inspected for rat infestation	84	—	33	—	—
Visits <i>re</i> Rent Restriction Acts	1	—	—	—	—
Miscellaneous	3001	59	58	2	—
Slaughter-houses	2739	—	—	—	—
Shops (under Shops Act)	24	6	—	—	—
Shops (Re-Inspections)	24	—	11	—	—

WATER-CLOSETS :

Additional W.C.s provided	...	...	...	...	4
W.C.s reconstructed	...	...	...	...	15
Lighting and ventilation improved	...	...	...	...	6
New pans and traps fixed	...	...	...	...	318
W.C.s cleansed	...	...	...	...	8
Flushing apparatus provided	...	...	...	...	28
Flushing apparatus repaired	...	...	...	...	217
Miscellaneous repairs	...	...	...	...	133

ERADICATION OF BED BUGS :

No. of houses infested with bed bugs	...	...	...	...	33
No. of houses disinfested by Naptha	...	...	...	...	1
No. of houses disinfested by other insecticides	...	...	...	...	134
No. of family's furniture disinfested	...	...	...	...	189
No. of visits in connection with furniture disinfection	...	...	...	...	585

CESSPOOLS :

Abolished and house connected to sewer	...	...	...	...	3
Emptied	...	...	...	...	5

RAT DESTRUCTION :

Unpoisoned baits :—					
Laid	...	...	...	...	109,240
Taken	...	...	...	...	52,587
Poisoned baits :—					
Laid	...	...	...	...	55,753
Taken	...	...	...	...	12,835

URINALS :

Re-constructed	...	...	...	...	...	1
Lighting and ventilation improved	...	...	...	...	...	4
Flushing apparatus fixed or repaired	...	...	...	...	...	21
Floors repaired	...	...	...	...	...	2
Other repairs	...	...	...	...	...	43

DAIRIES, COWSHEDS AND MILKSHOPS :

No. of premises registered	...	...	...	...	...	1
Existing dairies improved	...	...	...	...	...	1
Paving repaired	...	...	...	...	...	2
Limewashing or cleansing carried out	...	...	...	...	...	14
Accumulations of manure removed	...	...	...	...	...	2

ICE CREAM PREMISES :

No. of premises registered	...	...	...	...	...	72
Ash-bins provided	...	...	...	...	...	2
Other repairs	...	...	...	...	...	1

FOOD SHOPS, KITCHENS AND PREMISES USED FOR PREPARATION OR MANUFACTURE OF PRESERVED FOODS :

Communicating sleeping places abolished	...	...	...	...	...	1
Accumulations removed	...	...	...	...	...	8
Cleanliness improved	...	...	...	...	...	32
Storage arrangements improved	...	...	...	...	...	2
Ash-bins provided	...	...	...	...	...	1
Washing-up sinks fixed	...	...	...	...	...	1
Water supply provided	...	...	...	...	...	2
Other repairs	...	...	...	...	...	16

FRIED FISH SHOPS :

Cleansing carried out ...	...	...	...	...	4
Storage accommodation provided or improved	...				2
Accumulations removed	...	...	...	...	1
Other repairs	...	...	...	...	2

OFFENSIVE TRADES :

Accumulations removed	1
-----------------------	-----	-----	-----	-----	---

SLAUGHTER HOUSES :

Miscellaneous repairs	1
-----------------------	-----	-----	-----	-----	---

STABLES :

Manure receptacles provided or repaired			1
---	-----	-----	--	--	---

BACK LANES :

Accumulations removed	...	...	...	...	14
Surfaces repaired	...	...	...	...	1

REFERENCES TO OTHER DEPARTMENTS :

To the City Engineer	...	...	...	...	239
To the Water Engineer	...	...	...	...	53
To the Housing Estates Manager	...	...	...	...	1,223
To the Secretary for Education	...	...	...	...	2
To other Departments	...	...	...	...	200

Rats and Mice Destruction. The number of complaints of rat infestation received during the year was 351. This compares with 369 received during the year 1946, and 444 during 1945.

The systematic treatment of both surface infestations and sewers continued during the year.

1,703 inspections of premises were carried out in connection with rat infestation, 1,387 of these inspections being applied to house property and 316 inspections being made of other premises.

It was necessary to serve 341 notices requiring treatment of premises, 244 of which were complied with at the end of the year.

HOUSING.

1. INSPECTION OF DWELLING-HOUSES DURING THE YEAR:—

(1)	(a)	Total number of dwelling-houses inspected for defects (under Public Health or Housing Acts)	6590
	(b)	Number of inspections made for the purpose	24442
(2)	(a)	Number of dwelling-houses (included in sub-head (1) above) which were inspected and recorded under the Housing Consolidated Regulations, 1925 and 1932 ...	93
	(b)	Number of inspections made for the purpose	272
(3)		Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation	89
(4)		Number of dwelling-houses (exclusive of those referred to under the preceding sub-head) found not to be in all respects reasonably fit for human habitation	2635

2. REMEDY OF DEFECTS DURING THE YEAR WITHOUT SERVICE OF FORMAL NOTICES:—

Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their Officers	3042
--	------

3. ACTION UNDER STATUTORY POWERS DURING THE YEAR:—

(a) Proceedings under Sections 9, 10 and 16 of the Housing Act, 1936:

(1)	Number of dwelling-houses in respect of which notices were served requiring repairs	4
(2)	Number of dwelling-houses which were rendered fit after service of formal notices:	
	(a) By owners	Nil
	(b) By local authority in default of owners	Nil

(b) Proceedings under Public Health Acts:

(1)	Number of dwelling-houses in respect of which notices were served requiring defects to be remedied	610
(2)	Number of dwelling-houses in which defects were remedied after service of formal notices:	
	(a) By owners	554
	(b) By local authority in default of owners	Nil

(c) Proceedings under Sections 11 and 13 of the Housing Act, 1936 :

(1) Number of dwelling-houses in respect of which Demolition Orders were made	45
(2) Number of dwelling-houses demolished in pursuance of Demolition Orders	Nil

(d) Proceedings under Section 12 of the Housing Act, 1936 :

(1) Number of separate tenements or underground rooms in respect of which Closing Orders were made	26
(2) Number of separate tenements or underground rooms in respect of which Closing Orders were determined, the tenement or rooms having been rendered fit	Nil
(3) Number of Undertakings not to use unfit houses accepted	14

4. HOUSING ACT, 1936. PART IV—OVERCROWDING :—

(a) (1) Number of dwellings overcrowded at the end of the year	760
(2) Number of families dwelling therein	847
(3) Number of persons dwelling therein	3847
(b) Number of new cases of overcrowding during the year	241
(c) (1) Number of cases of overcrowding relieved during the year	78
(2) Number of persons concerned in such cases	305

Factories.

Details of the sanitary inspection of factories under the Factories Act, 1937, are given in the following tables :—

1. Inspections :—

<i>Premises.</i>	<i>Number of</i>		
	<i>Inspections.</i>	<i>Written Notices.</i>	<i>Occupiers prosecuted.</i>
Factories with mechanical power	226	38	—
Factories without mechanical power	40	3	—

2. Defects found.

<i>Particulars.</i>	<i>Number of Defects.</i>			<i>No. of defects in respect of which prosecutions were instituted.</i>
	<i>Found.</i>	<i>Remedied.</i>	<i>Referred to H.M. Inspector.</i>	
Want of cleanliness ...	1	1	—	—
Overcrowding ...	—	—	—	—
Unreasonable temperature ...	—	—	—	—
Inadequate ventilation ...	—	—	—	—
Ineffective drainage of floors	—	—	—	—
Sanitary Conveniences—				
insufficient ...	1	—	—	—
unsuitable or defective	7	—	—	—
not separate for sexes	—	—	—	—
Other offences ...	1	1	—	—

Cremations. The number of cremations during the year 1947 was 896. Of this number 183 were in respect of residents of the City of Plymouth.

Up to the end of 1947 a total of 6,788 cremations have been carried out since the Crematorium opened in 1934.

INSPECTION AND SUPERVISION OF FOOD.

Bacteriological Examination of Milk Supplies. 430 samples of milk were submitted for bacteriological examination, of which 404 were found to be satisfactory, and 26 in an unsatisfactory state of cleanliness.

In addition, 316 samples were submitted to the Phosphatase Test, 3 being unsatisfactory.

The following tables show the number and results of samples submitted to :—

- (1) Methylene Blue Test.
- (2) Phosphatase Test.

(1) Methylene Blue Test :

<i>Description of Milk.</i>	<i>Total No. of Samples.</i>	<i>Satisfactory.</i>	<i>Unsatisfactory.</i>
Tuberculin Tested (Certified) Milk ...	205	193	12
Accredited Milk ...	7	5	2
Sterilised Milk ...	13	13	—
Heat Treated Milk ...	2	2	—
Pasteurised Milk ...	172	163	9
Tuberculin Tested ...	31	28	3
Totals ...	430	404	26

(2) Phosphatase Test :

<i>Description of Milk.</i>	<i>Total No. of Samples.</i>	<i>Satisfactory.</i>	<i>Unsatisfactory.</i>
Pasteurised Milk ...	287	284	3
Sterilised Milk ...	27	27	—
Heat Treated	2	2	—
Totals ...	316	313	3

**Examination
of Milk for
Tubercle
Bacilli.**

23 samples of milk were examined biologically for the presence of Tubercle Bacilli, none being found positive.

The milk from approximately 264 cows has been examined for the presence of Tubercle Bacilli, and out of this number no cows were found to be suffering from tuberculosis of the udder.

Licences under
the Milk (Special
Designations)
Order, 1936.

The following table shows the number of licences
to use the various designations applied to milk
issued during the year :

<i>Description of Licence.</i>	<i>No. issued</i>
Pasteuriser's licences (" Holder " Process)	4
Pasteuriser's licences (High Temperature Short Time Process)	1
Retail Tuberculin Tested licences	22
Accredited Producer's licences	2
Retail Pasteurised licences	2
Tuberculin Tested Bottling licences	2
Total	33

BACTERIOLOGICAL EXAMINATION OF SAMPLES OF
ICE CREAM.

During the year 30 samples of ice cream were submitted the form of methylene blue test suggested by the Ministry of Health. The table below gives the results of these tests.

<i>Grade</i>	<i>Hot Mix</i>	<i>Cold Mix</i>
Grade 1. Time taken to reduce methylene blue 4½ hours or more	19	7
Grade 2. Time taken to reduce methylene blue 2½ to 4 hours	1	Nil
Grade 3. Time taken to reduce methylene blue ½ to 2 hours	1	2 both 2 hours
Grade 4. Time taken to reduce methylene blue 0 hours	Nil	Nil
TOTAL	21	9

FOOD AND DRUGS SAMPLES REPORTED NOT GENUINE

<i>Article</i>	<i>Nature of Adulteration</i>	<i>Action taken</i>
Raw Milk.	Contained 87% of added water.	Fined £10.
Baking Powder.	58% deficient in available C.O ₂ .	Letter of caution.
Raw Milk.	4% deficient in milk fat.	Letter of caution.
Oatmeal.	Infested with meal mite.	Letter of caution.
Tincture of Iodine.	6% deficient in iodine.	Letter of caution.
Tincture of Iodine.	Contained an excess of 6% of iodine.	Letter of caution.
Raw Milk.	18% deficient in fat.	Letter of caution.
Raw Milk.	1% deficient in fat.	Letter of caution.
Raw Milk.	Contained 2% added water.	Letter of caution.
Raw Milk.	Contained 2% added water.	Fined 10s.
Raw Milk.	Contained 3% added water.	Fined 10s.
Raw Milk.	Contained 1% added water.	Fined 10s.
Raw Milk.	6% deficient in fat.	Informal sample.
Raw Milk.	Contained 4% added water.	No action.
Raw Milk.	Contained 1% added water.	No action.
Raw Milk.	Contained 4% added water.	Fined £5.
Raw Milk.	Contained 19% added water.	Fined £5.
Smoked Herring Spread.	Unfit for food by reason of bact. Contamination.	Informal sample. Remainder of stock destroyed.
Raw Milk.	67% deficient in fat.	Informal sample.
Raw Milk.	43% deficient in fat.	Fined £3.
Camphorated Oil.	6% deficient in camphor.	Letter of caution.
Camphorated Oil.	Contained an excess of 11% of camphor.	Letter of caution.
Sausages.	46% deficient in meat.	Informal sample.
Fruit Salad.	Contained 600 parts per million of tin.	Consignment returned to distributors.
Salad Oil.	Contained 5% of mineral oil.	Letter of caution, stocks withdrawn from sale.

During the year, in following up samples of milk below the standard, nine “ Appeal to Cow ” samples were taken from three farms.

Initial Sample			“ Appeal to Cow ” Sample			
Non-fatty solids	Milk-fat	Observations	Non-fatty solids	Milk-fat		
8.33 8.24 8.41	3.37 3.69 3.20	Morning Milk	{ 9.0 9.0 8.95 8.70 8.90	3.6 3.25 3.75 3.80 3.25		
8.33	3.70			do.	8.80 3.40	
8.86	1.70			do.	{ 8.63 8.80 8.84	3.75 4.05 4.25

Inspection of Meat and Slaughter-houses.

There are four private slaughter-houses in use in the City, and these were visited on 2,700 occasions during the year.

Also 1,154 visits were made to food factories and butchers shops.

Carcases Inspected and Condemned.

The total number of carcases inspected at the Meat Market and in the private slaughter-houses and food factories during the year was 149,796, which was made up as follows :—

Bovines	...	...	...	...	11,550
Calves	...	...	...	...	8,781
Sheep and Lambs	...	...	...	...	127,010
Pigs	...	...	...	...	2,455

The total weight of meat and offal condemned during the year from animals killed inside and outside the City was 312 tons 18 cwts. 3 qrs. 0 lbs. This amount was made up as follows :—

	<i>Cattle excluding Cows.</i>	<i>Cows.</i>	<i>Calves.</i>	<i>Sheep and Lambs.</i>	<i>Pigs.</i>
Number killed	3746	2905	2497	17153	109
Number inspected	11550		8781	127010	2455
<i>All diseases except Tuberculosis.</i>					
Whole carcases condemned	122 $\frac{3}{4}$		45	129 $\frac{1}{2}$	6
Carcases of which some part or organ was condemned	4443		94	3843	74
Percentage of the number in- spected affected with disease other than Tuberculosis	13.1	25.3	1.07	3.02	3.01
<i>Tuberculosis only</i>					
Whole carcases condemned	149 $\frac{3}{4}$		3	1	10
Carcases of which some part or organ was condemned	1174		17	—	215
Percentage of the number inspected affected with Tuberculosis	3.9	7.7	.001	.000008	8.7

FOOD AND DRUGS.

Adulteration, etc. The various samples of food and drugs submitted for analysis during the year are classified in the following table, together with the number of the various articles which were found to be adulterated :—

SAMPLES TAKEN UNDER THE FOOD AND DRUGS ACT.

<i>Articles</i>	<i>Official Samples</i>		<i>Informal Samples</i>		<i>Total No.</i>
	<i>Genuine</i>	<i>Adulterated</i>	<i>Genuine</i>	<i>Adulterated</i>	
Aspirin Tablets ...	—	—	17	—	17
Butter ...	—	—	18	—	18
Baking Powder ...	—	—	2	1	3
Cooking Fat ...	—	—	17	—	17
Coffee ...	—	—	13	—	13
Cocoa ...	—	—	11	—	11
Camphorated Oil ...	—	—	11	2	13
Castor Oil ...	—	—	14	—	14
Cod Liver Oil ...	—	—	7	—	7
Cheese ...	—	—	18	—	18
Cordials ...	2	—	5	—	7
Condensed Full Cream Milk ...	—	—	1	—	1
Coffee and Chicory ...	—	—	1	—	1
Crab Meat ...	—	—	1	—	1
Dried Herbs ...	—	—	5	—	5
Dripping ...	—	—	1	—	1
Epsom Salts ...	—	—	12	—	12
Flour ...	—	—	1	—	1
Flavourings ...	—	—	9	—	9
Fruit Salad ...	—	—	—	1	1
Ground Spices ...	—	—	10	—	10
Gelatine ...	—	—	3	—	3
Golden Syrup ...	—	—	1	—	1
Jam ...	—	—	3	—	3
Lard ...	—	—	1	—	1
Malt Extract ...	—	—	2	—	2
Malt Vinegar ...	—	—	5	—	5
Marmalade ...	—	—	3	—	3
Margarine ...	—	—	18	—	18
Meat and Fish Paste ...	—	—	21	—	21
Meat and Veg. Extract ...	—	—	6	—	6
Magnesia ...	—	—	10	—	10
Olive Oil ...	—	—	1	—	1
Oatmeal ...	—	—	5	1	6
Pepper ...	—	—	5	—	5
Pasteurised Milk ...	14	—	2	—	16
Raw Milk ...	111	13	1	2	127
Sterilised Milk ...	2	—	—	—	2
Sausages ...	—	—	—	1	1
Sugar ...	—	—	18	—	18
Soup (Tinned) ...	—	—	26	—	26
Sweetening Tablets ...	—	—	1	—	1
Saccharin Tablets ...	—	—	14	—	14
Semolina ...	—	—	9	—	9
Smoked Herring Spread ...	—	—	—	1	1
Salad Oil ...	—	—	1	1	2
Savouries ...	2	—	—	—	2
Tea ...	—	—	14	—	14
Tincture of Iodine ...	—	—	12	2	14
Table Jelly ...	—	—	2	—	2
Vinegar ...	—	—	1	—	1
Zinc Ointment ...	—	—	6	—	6
GRAND TOTALS ...	131	13	365	12	521

SEIZURE OF UNSOUND FOODSTUFFS.

During the inspection of the kitchens and store rooms belonging to a local restaurant, a quantity of unsound tinned and other foodstuffs was found. Some were badly contaminated by rat droppings; tinned foodstuffs were blown or decomposed. In all 116 containers comprising 29 varieties of foodstuffs were seized. They were taken before a Justice of the Peace who judged them to be unfit for human consumption and ordered their destruction. Proceedings were instituted against the occupiers of the restaurant for having this unsound foodstuff in their possession for the purpose of sale. The two defendants were convicted and each fined £10.

In addition, eight other charges were preferred against the two occupiers regarding the dirty condition of the kitchens and rooms used for the storage and preparation of food and for allowing such rooms to be infested with flies and rats. Both defendants were convicted and fined £2 on each of the eight charges—a total of £32.

**Foodstuffs
other than
Meat
(including
tinned goods).**

The number of inspections made of various food premises are shown in the table on page 52a.

Arising out of these inspections, the following foodstuffs were condemned :—

TINNED GOODS :—					<i>Tons</i>	<i>cwts.</i>	<i>qrs.</i>	<i>lbs.</i>
Meat	...	...	...	...	2	8	1	14
Fish	...	...	...	...	1	3	3	13
Milk	...	...	...	...	1	15	2	5
Soup	...	...	...	...	—	7	1	23
Fruit	...	...	...	...	4	4	1	19
Vegetables	...	...	...	...	2	10	0	17

PROVISIONS :—						<i>Tons</i>	<i>cwts.</i>	<i>qrs.</i>	<i>lbs.</i>
Tea	...	...	...	...	...	—	1	0	12
Fresh Fruit	...	...	...	...	...	7	10	3	3
Jam & Marmalade	...	...	...	...	...	—	15	3	24
Flour	...	...	...	...	...	—	11	3	16
Oats & Cereals	...	...	...	...	...	—	6	0	7
Biscuits	...	...	...	...	...	—	6	0	8
Sweets	...	...	...	...	...	—	2	2	27
Sausages and Sausage Meat	...	...	...	...	...	2	0	2	18
Sugar	...	...	...	...	...	—	1	2	6
Cheese	...	...	...	...	...	—	1	2	11
Dried Fruit	...	...	...	...	...	—	5	1	18
Miscellaneous	...	...	...	...	...	2	11	3	7

**Fish
Inspection.**

The following summary indicates the quantity of fish and shell-fish inspected during the year and the quantity found to be unfit for food :—

			<i>Tons</i>	<i>cwts.</i>	<i>qrs.</i>	<i>lbs.</i>
Quantity of fish inspected	...	...	2301	6	0	0
Quantity of mixed fish found to be unfit for human food	...	...	24	1	3	0
Quantity of shell-fish found to be unfit for human food	...	...	—	12	0	19

Infectious Diseases

Incidence. The following table shows the incidence of infectious diseases in Plymouth during 1947 and compares it with 1947 figures for England and Wales and County Boroughs and the figures for the City for 1945 and 1946.

<i>Disease</i>	<i>Plymouth 1947</i>	<i>England and Wales, 1947</i>	<i>126 County Boroughs and Great Towns 1947</i>	<i>Plymouth 1946</i>	<i>Plymouth 1945</i>
Typhoid Fever ...	0.00	0.01	0.01	0.00	0.00
Paratyphoid Fever	0.02	0.01	0.01	0.00	0.00
Cerebro-Spinal Fever	0.06	0.05	0.06	0.04	0.02
Scarlet Fever ...	0.79	1.37	1.54	1.29	2.04
Whooping Cough ...	2.43	2.22	2.41	1.94	2.34
Diphtheria ...	0.26	0.13	0.15	0.38	1.00
Erysipelas ...	0.21	0.19	0.21	0.32	0.39
Smallpox ...	0.00	0.00	0.00	0.00	0.00
Measles ...	14.05	9.41	9.13	1.22	16.80
Pneumonia ...	1.02	0.79	0.89	1.05	0.32

The table on page 72a shows the number of notifications received for each disease, classified by age groups. It also shows the percentage notified in each age group of the total of each disease.

The quarterly incidence of Infectious Diseases is shown in the table on page 73.

TABLE A.
SHOWING PROGRESS IN PROTECTING THE CHILD POPULATION
AGAINST DIPHTHERIA DURING 1947.

		<i>Position at 31st Dec., 1946.</i>	<i>Position at 31st Dec., 1947.</i>	<i>Increase during 1947.</i>
0-5 Years.	Child population under 5 years of age	15,960	17,320	1,360
	Number of such children who have received course of immunising injections	5,662	6,983	1,321
	Percentage of population under 5 years of age who have received course of immunising injections ...	35%	40%	5%
5-15 Years.	Child population aged 5-15 years ...	24,850	25,150	300
	Number of such children who have received course of immunising injections	15,960	17,152	1,192
	Percentage of population aged 5-15 years who have received course of immunising injections ...	64%	68%	4%

TABLE B.

TO SHOW WORK DONE IN DIPHTHERIA IMMUNISATION IN THE LAST SEVENTEEN YEARS AND THE TREND OF DIPHTHERIA CASES AND DEATHS IN THE SAME PERIOD.

Year.	Total Births.	Diphtheria. Total of		Primary Diphtheria Immunisations.			*Total immunised expressed as percent- age of births in previous years	Popula- tion.
		Cases.	Deaths.	Ages. 0-5.	Ages. 5-15.	Total No. 0-15.		
1930	3421	—	—			—	—	—
1931	3427	367	17	1282		1282	38%	191,800
1932	3251	444	20	1107		1107	32%	208,440†
1933	3232	337	18	972		972	30%	206,200†
1934	3203	376	15	335	363	698	22%	203,450†
1935	3065	481	23	874	1244	2118	66%	203,600†
1936	3061	455	40	662	1104	1766	58%	206,400†
1937	3073	272	17	500	1035	1535	50%	210,460†
1938	3305	357	15	430	707	1137	37%	211,800†
1939	3446	404	25	568	615	1183	36%	215,500†
1940	3295	1361	105	2812	6765	9577	278%	197,800
1941	2453	348	28	673	1244	1917	58%	149,300
1942	2817	227	16	2323	1029	3352	137%	127,300
1943	3144	209	10	1593	1050	2643	94%	136,530
1944	3477	163	4	1680	535	2215	70%	144,700
1945	3824	157	6	1701	417	2118	61%	157,580
1946	4272	68	2	2223	928	†3151	82%	176,070
1947	4490	49	§2	2485	769	3254	76%	181,600

* Taking the number of births in the previous year as the number of non-protected entrants into the 0-15 age groups, this percentage indicates progress only if it is greater than the over-all percentage of protection in the 0-15 age groups. Over-all percentage of protection 0-15 years at 31st December, 1947, was 57%.

† Includes Service personnel—Civilian population not available.

‡ Any discrepancy between the figure and the increases in Table A is due to the addition to the Central Index of the records of children immunised elsewhere and the records of children attending for reinforcing injections whose original records had been destroyed by enemy action.

§ In the case of one of these deaths the patient, although normally a resident in Plymouth, contracted and died of diphtheria whilst temporarily residing elsewhere.

TABLE C.

STATE OF PROTECTION AGAINST DIPHTHERIA OF CHILDREN UNDER
THE AGE OF 15 YEARS AT 31ST DECEMBER, 1947.

<i>Year of Birth.</i>	<i>By Primary Course within 4 years.</i>		<i>By Reinforcing Injection within 4 years.</i>		<i>By Primary or Reinforcing Dose more than 4 years ago.</i>		<i>Approx. child popula- tion. †</i>	<i>Unprotected.</i>	
	<i>No.</i>	<i>% of Age Group.</i>	<i>No.</i>	<i>% of Age Group.</i>	<i>No.</i>	<i>% of Age Group.</i>		<i>No.</i>	<i>% of Age Group</i>
1933	122	5	171	7	1118	45	2489	1078	43
1934	175	7	167	7	1072	43	2478	1064	43
1935	202	8	177	7	1281	53	2409	749	32
1936	211	9	291	13	1462	63	2317	353	15
1937	428	19	457	21	1169	51	2298	244	9
1938	334	14	459	18	1233	50	2473	447	18
1939	468	19	460	18	1087	44	2473	458	19
1940	448	17	430	16	659	25	2669	1132	43
1941	371	15	602	24	440	17	2520	1107	44
1942	618	20	664	22	376	12	3024	1366	46
Total 5-15	3377	13	3878	15	9897	39	25150*	7998	33
1943	1106	33	523	16	3	—	3370	1738	51
1944	1711	50	126	3	—	—	3490	1653	47
1945	1645	47	20	.5	—	—	3519	1854	52.5
1946	1697	52	—	—	—	—	3233	1536	48
1947	152	4	—	—	—	—	3708	3556	96
Total 0-5	6311	36	669	4	3	—	17320*	10337	60
Total 0-15	9688	23	4547	11	9900	24	42470*	18335	42

* These totals agree with the Registrar General's estimated population of children under 15 years of age at Mid. 1947.

† Proportionate to the birth rates in the relevant years.

TABLE D.

DIPHTHERIA AMONGST CHILDREN AGED 0-15 YEARS DURING THE
FOUR YEARS 1944-1947.

<i>Year.</i>	<i>Cases.</i>		<i>Deaths.</i>	
	<i>Unprotected.</i>	<i>Immunised.</i>	<i>Unprotected.</i>	<i>Immunised.</i>
1944	99	25	4	—
1945	83	30	5	1
1946	42	11	1	—
1947	26	8	1	—
Total for four years	250	74	11	1

1947 CASE INCIDENCE PER 10,000 CHILDREN, 0-15 YEARS OF AGE.

Unprotected population :

0-15 years : 18,335 14.18

Immunised population :

0-15 years : 24,135 3.31

Total population :

42,470 8.01

**Diphtheria
Immunisation.**

Reinforcement and " Follow-up ". Continuing the arrangement of sending out invitations to parents to bring their children for reinforcement injections, 1,567 letters were sent out and of the 2,231 reinforcements given during 1947 395 cases were traced directly to this invitation. Many others responded without bringing the letter to the clinic.

301 parents failed to bring their children to the clinics for the final injection of the initial course and were sent advisory notes, as a result of which 161 attended.

SUMMARY OF A REPORT ON THE FOLLOW-UP OF WHOOPING COUGH IMMUNISED CASES, 1947.

Since September, 1946, vaccination against Whooping Cough has been provided at all but one of the City's Immunisation Clinics.

For children aged 9 months and onwards, Burroughs Wellcome (20,000 mill. org. per c.c.) Whooping Cough Vaccine was used, in doses of 1 c.c. injected at four-weekly intervals, three times. Latterly, for children aged 5-9 months, Glaxo Combined Diphtheria-Whooping Cough Alum Precipitated Vaccine was introduced, two doses of 0.5 c.c., and one of 1.0 c.c. being given at four-weekly intervals.

In an attempt to determine the efficacy of these injections, a survey was made of those children who had been vaccinated.

The homes of all the children so vaccinated up to the end of July, 1947, were visited by a Health Visitor, to determine whether or not these children had contracted whooping cough since their injections. For comparison, the homes of an approximately equal number of children of similar ages who had not been vaccinated were visited, or, in a few cases, were investigated by post. The same questionnaire was presented to each group, asking for the date on which whooping cough may have been contracted, the number of individuals residing per room in the house, the number of susceptible home contacts, over five and under five years old, and the presence or absence, during the period surveyed, of an infective home contact.

Of the 134 "immunised", 4 developed whooping cough since the vaccination.

Of the 135 controls, 15 developed whooping cough since the commencement of immunisation facilities.

The "immunised" had been under observation for an average of 5-7 months. Of the controls who had had whooping cough only 6 developed it within this period of time. True controls, therefore, may be numbered as 126, and they were under observation for summer months only, when whooping cough is less prevalent.

Two of the four "immunised" who developed whooping cough contracted it within one month of their last injection, when the full benefit of the course may not have been achieved.

The numbers of the susceptible home contacts in the two groups were nearly equal.

The average sizes of families and of homes were greater in the control group.

As the numbers of subjects, and of cases of whooping cough were small, and the period of observation short, the results are inconclusive. The value of the essay was rather in the experience gained in this type of field work.

The visits entailed much hard work, and the time of a Health Visitor for five afternoons a week for six weeks. This survey was carried out by Dr. M. Harvey, Assistant Medical Officer of Health.

Information compiled from replies to Questionnaires.

Date of survey taken as 24th October, 1947 (mean of dates of commencing and terminating visits to households.)

1. (a) Number of whooping cough cases in immunised children	4	No. of survey cases	134
(b) Number of whooping cough cases in controls	15	ditto.	135
		Gross mths.	Average.
2. (a) Observation period of immunised children		765	5.71 mths.
(b) Observation period of controls		1837	13.61 mths.
3. Number of whooping cough cases in controls during last 5.71 months—6.			
		Total whooping cough cases where there was an infective contact (immunised cases).	
4. (a) Total number of infective contacts in immunised cases ...	2	ditto.	1
(b) Total number of infective contacts in controls	12	controls.	12
5. <i>Home Environment.</i>		Immunised cases.	Controls.
(i) Gross total susceptible home contacts			
Under 5 years ...		63	67
5-15 years ...		70	78
Average Under 5 years ...		.47	.5
5-15 years ...		.52	.58
(ii) Gross susceptible home contacts in whooping cough cases			
Under 5 ...		4	6
Over 5 ...		—	12
Average Under 5 ...		1	.4
Over 5 ...		—	.8
(iii) Persons per room, Gross total ...		728 in 683	875 in 782
Average ...		1.07	1.12
(iv) Average age in months		25.77	25.87

MORTALITY FROM CERTAIN INFECTIVE DISEASES, 1921-1947.

PLYMOUTH COMPARED WITH ENGLAND AND WALES. PER 1,000 CIVILIAN POPULATION.

YEAR.	<i>Diphtheria.</i>			<i>Scarlet Fever.</i>			<i>Measles.</i>			<i>Whooping Cough.</i>		
	PLYMOUTH		<i>England and Wales Death Rate.</i>	PLYMOUTH		<i>England and Wales Death Rate.</i>	PLYMOUTH		<i>England and Wales Death Rate.</i>	PLYMOUTH		<i>England and Wales Death Rate.</i>
	<i>No. of Deaths.</i>	<i>Death Rate.</i>		<i>No. of Deaths.</i>	<i>Death Rate.</i>		<i>No. of Deaths.</i>	<i>Death Rate.</i>		<i>No. of Deaths.</i>	<i>Death Rate.</i>	
1921-1930 Average ...	20	.10	.08	3	.01	.02	21	.10	.10	14	.07	.11
1931-1940 Average ...	29	.14	.07	2	.00	.01	8	.03	.04	10	.04	.04
1941 ...	28	.18	.06	—	—	.00	12	.08	.02	11	.07	.06
1942 ...	16	.12	.04	—	—	.00	1	.00	.01	2	.01	.02
1943 ...	10	.07	.03	—	—	.00	8	.06	.02	8	.06	.02
1944 ...	4	.02	.02	—	—	.00	1	.00	.00	1	.00	.02
1945 ...	6	.03	.01	—	—	.00	1	.00	.01	3	.01	.01
1946 ...	2	.01	.01	—	—	.00	1	.00	.00	4	.02	.02
1947 ...	2	.01	.01	—	—	.00	9	.05	.01	2	.01	.02

NOTES.—A series of dashes indicates that there were no deaths from that disease in that year.
A rate of .00 indicates that there were too few deaths to be expressed as a rate to two decimal places.

INFECTIOUS DISEASES NOTIFIED 1947—CIVILIANS—BY AGE GROUPS.

	Under 1 Year.		1-2 Years.		2-3 Years.		3-4 Years.		4-5 Years.		5-10 Years.		10-15 Years.		15-20 Years.		20-25 Years.		25-35 Years.		35-45 Years.		45-65 Years.		65 Years and Over.		Total All Ages.
	No.	% of Total.	No.	% of Total.	No.	% of Total.	No.	% of Total.	No.	% of Total.	No.	% of Total.	No.	% of Total.	No.	% of Total.	No.	% of Total.	No.	% of Total.	No.	% of Total.	No.	% of Total.	No.	% of Total.	
Scarlet Fever ...	1	.69	1	.69	3	2.07	12	8.27	12	8.27	77	53.1	23	15.86	5	3.44	2	1.31	5	3.44	2	1.31	2	1.31	—	—	145
Diphtheria ...	—	—	4	8.02	4	8.02	3	6.01	3	6.01	14	28.57	6	12.02	2	4.01	5	10.2	3	6.01	3	6.01	2	4.01	—	—	49
Paratyphoid ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	33.33	1	33.33	1	33.33	—	—	—	—	—	—	3
Pneumonia ...	11	5.91	17	9.14	7	3.76	10	5.36	7	3.76	19	10.21	1	.53	9	4.83	9	4.83	11	5.91	23	12.31	45	23.65	17	9.14	186
Puerperal Pyrexia ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	4	10.81	9	24.32	19	51.35	5	13.5	—	—	—	—	37
Cerebro-Spinal Fever	2	16.66	1	8.33	2	16.66	1	8.33	—	—	3	25.0	1	8.33	1	8.33	1	8.33	—	—	—	—	—	—	—	—	12
Poliomyelitis ...	2	25.0	—	—	2	25.0	1	12.5	—	—	1	12.5	—	—	1	12.5	1	12.5	—	—	—	—	—	—	—	—	8
Ophthalmia Neonatorum ...	17	100.0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	17
Erysipelas ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	2.56	2	5.12	3	7.68	6	15.3	13	33.3	14	35.8	39
Whooping Cough ...	62	13.99	53	11.97	55	12.41	67	15.12	76	17.16	124	27.9	1	.22	—	—	1	.22	3	.66	1	.22	—	—	—	—	443
Measles ...	137	5.3	283	11.08	345	13.5	353	13.7	399	15.6	933	36.5	46	1.8	12	.46	20	.78	16	.63	6	.23	2	.08	—	—	2552
Food Poisoning ...	—	—	—	—	1	16.6	—	—	—	—	—	—	—	—	—	—	3	50.0	—	—	2	33.3	—	—	—	—	6
Dysentery ...	—	—	—	—	1	33.3	—	—	—	—	—	—	—	—	—	—	—	—	1	33.3	—	—	—	—	1	33.3	3
Gastro-Enteritis (under 2 years) ...	136	83.9	26	16.05	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	162
TOTALS ...	368	10.05	385	10.5	420	11.4	447	12.02	497	13.5	1171	31.9	78	2.1	36	.98	54	1.4	62	1.7	48	1.3	64	1.74	32	.87	3662

QUARTERLY INCIDENCE OF INFECTIOUS DISEASES—PLYMOUTH—1947.

	JAN.—MARCH.			APRIL—JUNE.			JULY—SEPT.			OCT.—DEC.			TOTALS FOR YEAR.		
	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
Scarlet Fever ...	28	28	56	9	20	29	7	8	15	9	36	45	53	92	145
Diphtheria ...	3	3	6	13	4	17	2	6	8	7	11	18	25	24	49
Paratyphoid ...	—	—	—	—	1	1	1	1	2	—	—	—	1	2	3
Pneumonia ...	61	42	103	17	13	30	8	3	11	25	17	42	111	75	186
Puerperal Pyrexia	—	14	14	—	9	9	—	6	6	—	8	8	—	37	37
Cerebro-Spinal Fever ...	2	2	4	2	1	3	4	—	4	—	1	1	8	4	12
Poliomyelitis ...	—	—	—	—	—	—	3	1	4	4	—	4	7	1	8
Ophthalmia Neonatorum ...	5	5	10	2	—	2	1	3	4	1	—	1	9	8	17
Erysipelas ...	4	9	13	2	6	8	3	5	8	3	7	10	12	27	39
Whooping Cough	86	82	168	67	63	130	53	42	95	25	25	50	231	212	443
Measles ...	752	793	1545	305	351	656	95	59	154	93	104	197	1245	1307	2552
Food Poisoning...	1	1	2	1	—	1	1	2	3	—	—	—	3	3	6
Dysentery ...	2	—	2	—	—	—	1	—	1	—	—	—	3	—	3
Gastro-Enteritis (under 2 years)	6	1	7	38	35	73	36	15	51	20	11	31	100	62	162
TOTALS ...	950	980	1930	456	503	959	215	151	366	187	220	407	1808	1854	3662

Vaccination.

The following table gives particulars of vaccinations carried out in the City during the past five years.

<i>Year</i>	<i>Births</i>	<i>Primary vaccinations</i>	<i>Percentage of Children vaccinated</i>	<i>Re- vaccinations</i>
1943 ...	2754	1113	41.10	22
1944 ...	3016	1663	55.14	85
1945 ...	3752	1803	48.05	39
1946 ...	3947	1890	47.88	74
1947 ...	4490	1972	43.92	6

The City Isolation Hospital and Lee Mill Hospital

REPORT OF THE MEDICAL SUPERINTENDENT.

General Remarks.

No major change has taken place in the hospital during the year. The new stores system, to which allusion was made in the last report, is now in full operation and has proved entirely satisfactory.

It was hoped that the conversion of Ward 3 into a cubicle ward, together with the installation of central heating into Wards 1, 2 and 3 would by now have been completed. Unfortunately, the entire work has been postponed for a year owing to shortage of labour and materials. These alterations should certainly be put in hand as soon as possible as the present cubicle accommodation is quite inadequate in epidemic times and the heating of these three wards by obsolete patterns of coal fire has proved unsatisfactory.

Lee Mill Hospital has not been opened during the year, but the grounds there have supplied ample green vegetables and potatoes to this hospital.

Nursing Staff. Miss B. E. Ball, lately a Ward Sister in this hospital, has now taken her Sister Tutor's Diploma and has returned to the staff in that capacity.

On November 4th, the first group of Comprehensive Students (6 female and 1 male) came to us from the Central Preliminary Training School.

The examination results for the Final State Fever Certificate have been good and during the year sixteen candidates were successful. Four passed parts 1 and 2 of the Preliminary State Examination and two passed in part 2 only.

Six of the candidates who passed their Final Fever Certificate Examination left the hospital to undergo general training for their S.R.N. certificate.

Domestic.

There has been no great difficulty in obtaining sufficient domestic staff for this hospital during the year.

General Statistics

				<i>Plymouth Outside</i>		
				<i>Area.</i>	<i>Area.</i>	<i>Total.</i>
Cases Admitted	...	...	...	489	78	567
Cases Discharged	...	...	...	458	82	540
Service Cases admitted	...	...	...	40	—	40
(included in above)						
Deaths	...	...	...	22	3	25

During the year 84 visits were paid to patients outside the hospital at the request of medical practitioners in the district and other Hospital Authorities, and 2,019 specimens were sent to the Central Laboratory as follows :—

Swabs	...	...	...	...	...	1273
Fæces	...	...	...	...	...	50
Urines	...	...	...	...	...	30
Slides	...	...	...	...	...	142
Bloods	...	...	...	...	...	107
Cerebro Spinal Fluids	...	...	...	...	...	57
Sputums	...	...	...	...	...	353
Other Examinations	...	...	...	...	...	7
						2019

Scarlet Fever. As in previous years, only those cases where facilities at home for isolation or treatment were inadequate were admitted to hospital. Generally speaking the disease was of a mild type. Altogether 68 cases received treatment—54 from Plymouth and 14 from districts outside Plymouth.

OUTSIDE CASES ADMITTED FROM :—

Plympton R.D.C.	...	...	...	5
Torpoint U.D.C.	...	...	...	4
Salcombe U.D.C.	...	...	...	2
Tiverton R.D.C.	...	...	...	2
Tavistock and District Public Health Services Area	...	...	...	1

It was only necessary to amend the diagnosis in one of these cases, i.e. to Toxic Erythema.

Among the Plymouth cases, the diagnosis was amended as follows :—

Toxic Erythema	...	...	...	...	2
Measles	...	...	...	...	2
Follicular Tonsillitis	...	...	...	...	1
Rubella	...	...	...	...	1
Scarlet Fever and Diphtheria	...	...	...	...	1

Diphtheria. The number of admissions, namely 120, were the lowest ever received in the history of the Hospital and most of these cases were of a mild type. There were no deaths from Diphtheria in the hospital for the first time. These figures are unique in the history of Plymouth which in the past years has always had a heavy incidence of Diphtheria. This is a great tribute to the success of the Immunisation Campaign, but at the same time it must be remembered that the Diphtheria rate has also dropped in countries where immunisation has not been so carefully carried out. It is therefore imperative that immunisation should still be kept at a high level lest the public be lulled into a false sense of security due possibly to a temporary lessening of the disease due to unknown causes.

No. of admissions	...	...	...	...	120
No. of deaths	...	...	...	...	Nil
No. of Plymouth cases	...	...	...	...	102
No. of cases from districts outside Plymouth	...	...	...	...	18

The 18 cases from outside Plymouth were admitted from, and the diagnosis altered as follows :—

<i>Admitted from</i>				<i>Amended Diagnosis</i>			
Plympton R.D.C.	...	7		Glandular Fever	...	...	2
				Tonsillitis	...	...	2
Kingsbridge R.D.C.	...	3					
Tavistock Public Health Services Area	...	5	...	Tetanus	...	...	1
				Glandular Fever	...	...	1
				Staphylococcal Pharyngitis	...	...	1
St. Germans R.D.C.	...	1		Follicular Tonsillitis	...	...	1
Saltash Borough	...	1		Glandular Fever	...	...	1
Looe U.D.C.	...	1		Glandular Fever	...	...	1

Plymouth Cases.

After observation, the diagnosis was amended in the following 60 cases :—

Tonsillitis (various types)	...	...	29
Stomatitis	...	...	2
Ulcerative Stomatitis and Tonsillitis	...	...	1
Vincent's Angina	...	...	1
Scarlet Fever	...	...	1
Naso-pharyngeal catarrh	...	...	1
Glandular Fever	...	...	10
Peritonsillar Abscess	...	...	3
Secondary Syphilis	...	...	1
Infantile Tetany	...	...	1
Broncho-pneumonia	...	...	1
Diphtheria and Scarlet Fever	...	...	1
Catarrhal Laryngitis	...	...	5
Laryngeal Diphtheria	...	...	2
Erythema Multiforma	...	...	1

Laryngeal Diphtheria. 9 cases were notified as such, and admitted ; 6 from Plymouth and 3 from areas outside Plymouth (1 St. Germans R.D.C. ; 1 Plympton R.D.C. ; and 1 from the Tavistock area.) 3 of these cases, 2 from Plymouth and 1 from St. Germans R.D.C., were confirmed as being Laryngeal Diphtheria. The diagnosis in the remaining 6 cases was amended to Catarrhal Laryngitis 4 ; Alveolar abscess 1, and Diphtheria 1.

None of these cases required tracheotomy and responded to Penicillin therapy in a most satisfactory manner.

Acute Anterior Poliomyelitis. A record number of admissions of patients suspected to be suffering from this disease occurred during the year, namely 43 cases. Of these 26 were confirmed as suffering from this disease, 8 from Plymouth and 18 from outside the City. The routine procedure was to keep these cases in the hospital for three weeks and then transfer them to Mount Gold Orthopaedic Hospital for continuation of their treatment after the infectious stage had passed. These arrangements proceeded very smoothly and our thanks are due to Mount Gold Hospital for their co-operation in making the scheme work so well. Most of the

cases so transferred made good progress. Further remarks on this outbreak will be found in the appendix following this section of the report.

Of the 43 cases admitted to the Hospital up to December 31st, 1947, 18 were from Plymouth and 25 from areas outside Plymouth, particulars of the latter being as follows :—

Liskeard R.D.C.	...	...	...	...	1
Plympton R.D.C.	...	...	...	...	3
Kingsbridge R.D.C.	...	...	...	...	1
Tavistock Area	...	...	...	...	6
St. Germans R.D.C.	...	...	...	...	2
Holsworthy R.D.C.	...	...	...	...	2
Ashburton U.D.C.	...	...	...	...	2
Newton Abbot U.D.C.	...	...	...	...	4
Newton Abbot R.D.C.	...	...	...	...	2
Tiverton R.D.C.	...	...	...	...	1
Totnes R.D.C.	...	...	...	...	1

Of these, 8 from Plymouth and 18 from outside Plymouth were confirmed as Acute Anterior Poliomyelitis. The 18 confirmed cases from outside Plymouth came from the following areas :—

Tavistock Area	...	...	...	...	5
St. Germans R.D.C.	...	...	...	...	1
Holsworthy R.D.C.	...	...	...	...	2
Ashburton U.D.C.	...	...	...	...	2
Newton Abbot U.D.C.	...	...	...	...	4
Newton Abbot R.D.C.	...	...	...	...	2
Totnes R.D.C.	...	...	...	...	1
Walsall C.B.C.	...	...	...	...	1

There were 2 deaths (young men of 20 and 23 respectively) neither of whom were Plymouth residents. No Plymouth resident died from the disease.

The diagnosis in the 9 of the Plymouth patients who were not confirmed as Poliomyelitis was amended to :—

Osteomyelitis of the Astragalus	...	...	1
Coryza	...	...	1
Tonsillitis	...	...	1
Hysterical palsy	...	...	1
Heat stroke	...	...	1
Bruising of right knee	...	...	1
Gonococcal Arthritis	...	...	1
Para Typhoid	...	...	1
Bronchial Catarrh	...	...	1

The 8 admissions from areas outside Plymouth which were not confirmed as Poliomyelitis were diagnosed as :—

Infective Arthritis and Osteomyelitis	...	1
Sub-acute Rheumatism	...	2
Enteritis	...	1
Influenza	...	1
Scarlet Fever	...	1
Febrile Cold	...	1
Idiopathic Epilepsy	...	1

(For Notes on clinical conditions and treatment see page 78.)

Other Diseases.

During the year 273 cases of various other infections were treated as under ; 253 Plymouth cases and 18 cases from areas outside Plymouth. Details of the 253 Plymouth cases are as follows :—

<i>Notified as suffering from</i>				<i>Amended Diagnosis</i>			
Bronchitis and Enteritis	1			Enteritis	...	...	1
Broncho-Pneumonia and Whooping Cough	...	15		Measles	...	...	1
Broncho-Pneumonia	...	6		Measles and Broncho-pneumonia	...	...	3
				Diphtheria	...	...	1
Broncho-Pneumonia and Meningitis	...	...	1	Broncho-Pneumonia	...	...	1
Chicken Pox and Measles	1			Scarlet Fever and Chicken Pox	...	...	1

<i>Notified as suffering from</i>				<i>Amended Diagnosis</i>			
Chicken Pox and Broncho-							
Pneumonia	...	...	1	Chicken Pox	...	...	1
Chicken Pox	...	...	12	Chicken Pox and Scarlet			
				Fever	...	...	1
				Chicken Pox and Lobar			
				Pneumonia	...	...	1
				Impetigo	...	...	2
Cerebro-Spinal Fever	...		7	Staphylococcal Meningitis			1
				T.B. Meningitis	...	...	1
				Meningococcal Meningitis			1
				Tonsillitis	...	...	1
				Influenza	...	...	1
				Fibrositis of Neck			1
Dysentery	...	...	1	Chronic Constipation	...		1
Diarrhoea and Convulsions			1				
Erysipelas	...	...	4	Cavernous Sinus Throm-			
				bosis	...	...	1
Food Poisoning	...	...	1				
Febrile Cold	...	...	1				
Gastro-enteritis	...	...	19	Enteritis	...	...	2
				Disordered diet	...	...	1
				Gastro-enteritis and			
				Pneumonia	...	...	1
				Malnutrition	...	...	1
Influenza	...	...	1				
Laryngitis	...	...	1				
Meningitis	...	...	18	Pneumococcal meningitis	...		1
				Measles	...	...	1
				Bronchitis	...	...	2
				Heart block	...	...	1
				Coryza and Bronchitis	...		1
				Cerebro-spinal Fever	...		2
				Glandular Fever	...	...	1
				Meningococcal meningitis			2
				Gastric upset	...	...	1
				Broncho-pneumonia	...		1
				Lobar pneumonia	...		2
				T.B. Meningitis	...	...	2

<i>Notified as suffering from</i>				<i>Amended Diagnosis</i>			
Mumps	...	...	2	Streptococcal Cervical			
				Adenitis	...	...	1
Measles and Broncho-				Post measles and Laryngeal			
pneumonia	...	...	36	Diphtheria	...	...	1
				Measles and Encephalomye-			
				litis	...	...	1
				Measles and Bronchitis	...		2
				Broncho-pneumonia	...		1
				Measles	...	...	8
Measles and Bronchitis	...		1	Measles	...	...	1
Measles	...	...	48	Scarlet Fever	...	...	1
				Follicular Tonsillitis	...		2
				Polio-encephalitis	...	...	1
				Measles and Broncho-			
				pneumonia	...	...	2
				Toxic Erythema	...	...	2
				Rubella	...	...	5
Measles, Broncho-				Measles and Pneumonia	...		1
pneumonia and Pertussis			3	Measles Encephalomyelitis			
				and Whooping Cough	...		1
				Whooping Cough and			
				Bronchitis	...	...	1
Measles and Burns	...		2				
Measles and Dysentery	...		1	Measles	...	...	1
Measles and Osteomyelitis			1	Measles	...	...	1
Measles and Coeliac							
disease	...	...	1				
Measles and Encephalo-				Measles and Broncho-			
myelitis	...	...	1	pneumonia	...	...	1
Measles and Otitis media			1	Scarlet Fever	...	...	1
Observation	...	...	9	Tonsillitis	...	...	2
				Vincent's Angina	...	...	2
				Infected Insect Bite	...		1
				Infective Hepatitis	...		2
				Enteritis	...	...	1
				Reaction to TAF	...		1
Pneumonia, Lobar	...		2	Pleural effusion following			
				lobar pneumonia	...		1

<i>Notified as suffering from</i>				<i>Amended Diagnosis</i>			
Pneumonia	...	...	2	Broncho-pneumonia	...	...	1
				Influenza	...	...	1
Pleurisy	...	...	2	Pleurodynia	...	...	1
Pemphigus	...	...	1	Bullous Impetigo	...	...	1
Rubella	...	...	3	Toxic Erythema	...	...	1
Rubella and acute Otitis media	...	...	1	Scarlet Fever	...	...	1
Stomatitis	...	...	1	Vincent's Angina	...	...	1
Serum Reaction	...	...	3				
Typhoid Fever	...	...	6	T.B. Meningitis	...	...	1
				Erythema Nodosum	...	...	1
Tonsillitis	...	...	9	Streptococcal Cervical Adenitis	...	...	1
				Scarlet Fever	...	...	1
Paratyphoid Fever	...	...	3	Lobar pneumonia	...	...	1
				Acute Mastitis	...	...	1
T.B. Meningitis	...	...	1	Lymphocytic Choriomeningitis	...	...	1
Ulcerative Stomatitis	...	...	9				
Whooping Cough	...	...	13	Whooping Cough and Broncho-pneumonia	...	...	1
				Gastro-enteritis and Malnutrition	...	...	1
				Whooping Cough and Bronchitis	...	...	1

The 18 cases admitted from outside Plymouth are detailed below :—

<i>Notified as suffering from</i>				<i>Amended Diagnosis</i>			
Broncho-pneumonia	...	...	1	Whooping Cough and Broncho-pneumonia	...	...	1
Erysipelas	...	...	2	Cavernous Sinus Thrombosis	...	...	1
Gastro-enteritis	...	...	3	Meningitis	...	...	1
Measles	...	...	4				
Measles and Facial abscess	...	...	1	Measles and abscess of neck	...	...	1

<i>Notified as suffering from</i>				<i>Amended Diagnosis</i>			
Measles, Broncho-				Measles and Broncho-			
pneumonia and				pneumonia	...	...	1
Encephalitis	...	...	1				
Meningitis	...	...	3	Pneumococcal meningitis			1
				Enteritis	...	...	1
				Poliomyelitis	...	...	1
Typhoid Fever	...	...	1	T.B. Peritonitis	...	...	1
Para Typhoid Fever	...	...	2	Para B.	...	...	1
				Sub-acute bacterial			
				endocarditis	...	...	1

Pulmonary Tuberculosis. A Male Ward of 15 beds and a Female Ward of 12 beds are reserved for the treatment of Pulmonary Tuberculosis.

During the year there have been 56 admissions (38 Males and 18 Females.)

There were 4 deaths (2 Males and 2 Females.)

There were 54 discharges from the Hospital during 1947 (3 of these patients were admitted in 1945 and 22 in 1946). Of the 54 discharges, 4 patients required rather more active treatment than could be given at this Hospital and were transferred to Didworthy Sanatorium. 2 other Male (Service) patients were transferred to Service Hospitals.

Collapse therapy was carried out in 8 cases, necessitating 136 refills during the year.

All X-Ray work in connection with these cases has been carried out as in previous years at Beaumont House Tuberculosis Dispensary.

The Surgical treatment of Pulmonary Tuberculosis, i.e. the closure of cavities in the lung is offering a chance of cure to many who years ago would have been regarded as hopeless cases and something is being done to make this type of treatment available to such patients who would be likely to benefit.

Minor surgical procedures such as adhesion section, phrenic crush, etc., are done by the Thoracic Surgeon at Didworthy Sanatorium, but major procedures, i.e. thoracoplasty still have to be carried out by the Thoracic Surgeon at Bristol, their being no local chest centre.

Unfortunately no Womens' beds have been available at Frenchay Hospital, Bristol, for several years and it has been impossible to get the necessary operations performed there. Fortunately at the time of writing the more urgent cases have been dealt with by Mr. Wilson locally, but a surgical chest unit nearer than Bristol will soon become an absolute necessity as the present arrangements are inadequate for the numbers requiring surgical intervention.

SOME NOTES ON INFANTILE PARALYSIS.

Sporadic cases of Infantile Paralysis have occurred all over the country for many years, but it was not until 1947 that an outbreak of any significance occurred in Great Britain. Even this outbreak, severe though it was, cannot be compared to the widespread incidence of the disease which has occurred in other countries such as Scandinavia, Canada, U.S.A., and Australia. Curiously enough, all these countries have for many years enjoyed almost a complete immunity from epidemics of diphtheria, and it is strange that at a time when the incidence of diphtheria in Great Britain is almost negligible, that an outbreak of infantile paralysis should have occurred. It is probably a coincidence and only the future can tell whether there is any possible connection.

Unfortunately there is at present no exact knowledge as to the method of spread in the disease and little can be done by way of control except by advising the population to avoid overcrowded places during epidemic periods. Also, there is no known drug or serum which has the slightest effect in protecting, modifying or curing the disease, a fact not always appreciated by the medical profession.

A great deal of careful research into these problems is going on, but so far nothing of practical value has been discovered as yet.

The disease is caused by a virus which enters the body either through the throat and nose, or the alimentary canal, that is, the infection can either be inhaled or swallowed and recent work suggests that the virus may be disseminated by flies.

Once within the body the virus spreads to the central nervous system by way of the nerves supplying the throat or intestines and finally attacks the motor nerve cells of the spinal cord and brain stem. These cells are intimately connected with nerves supplying muscles and responsible for muscular contraction, so that the net result of the infection is a paralysis of muscles. This paralysis may be mild and localised to perhaps one limb, or dangerous and widespread, leading to death from paralysis of the muscles of respiration.

Mortality varies from 5–10%. Of those who survive an attack about one third make complete recoveries, one third partial recovery and the remainder suffer from severe and permanent disability.

One of the most striking features noted in the present series of cases was the tendency to early recovery, often much useful muscle function returning after 2–3 weeks.

As a general rule the disease has a sudden onset and most cases show three distinct phases in the development of the disease.

1. The sudden onset of ill-defined illness resembling in the beginning an attack of “influenza”, with raised temperature, sore throat, vomiting, diarrhoea, headache, drowsiness or restlessness. This is often followed by a latent period lasting from a few hours to a few days, when the temperature may return to normal and the patient feels better. In the abortive type of case no further symptoms occur, but in the majority of cases a nervous phase follows, which owing to its similarity to meningitis is often called the meningeal phase.

2. *Meningeal Phase*—There is usually a high temperature, severe headache, muscular pains, great tenderness of the limbs, stiffness of the neck and spine. Often there is difficulty in passing water and disturbed bowel function. These latter symptoms were especially marked in the present epidemic.

Sooner or later, usually within a day or two, the third or paralytic phase follows, where paralysis of the limbs, abdominal and spinal muscles become self evident.

In doubtful cases laboratory examination of the cerebro-spinal fluid is extremely helpful. As a rule, paralysis is maximal at the outset, but there is always a risk of further paralysis occurring while the temperature is raised. Only exceptionally does further paralysis occur after the temperature has dropped to normal.

TREATMENT OF INFANTILE PARALYSIS.

The treatment of the established disease, like its symptomology can be divided into three periods.

1. The period of isolation—usually three weeks.

2. Early orthopaedic treatment.
3. Late orthopaedic treatment, by operation and other measures designed to restore function to limbs which have failed to recover.

This report will deal with the first period, namely the treatment of the acute infectious stage. Subsequent treatment in stages 2 and 3 are carried out at Mount Gold Hospital under the care of the orthopaedic surgeons, with whom close co-operation is maintained during the whole of the attack, and I am greatly indebted both to Mr. Norman Capener and Mr. Geoffrey Lillie for their teaching, which is largely reproduced in these remarks.

In the acute stage, infantile paralysis is largely a general medical problem and the case should therefore be under the direction of a physician working in close conjunction with the surgeon who will continue treatment when the necessary period of isolation is over.

The treatment aims first at securing sleep and relief from pain and secondly correct posture from the very beginning, so essential for preventing contractions and wasting; thus making the orthopaedic surgeons work doubly difficult and prejudicing the patient's chances of ultimate recovery.

Pain in the early stages of the disease may be eased with sedatives together, if necessary, with hot moist packs to the affected muscles. Particular care should be taken regarding bladder function as patients in the acute phase often suffer from retention of urine.

Patients are nursed flat, a small pad under the loins and both knees, the heels protected with rings and the feet supported at right angles, both legs being separated towards the edges of the bed, and a cradle used to keep the weight of the bed-clothes off the lower limbs. If the arms are affected, they should be abducted and supported on pillows each side. Warmth is essential to the patient and an electric cradle is often found very comforting. The patient is kept at complete rest and as soon as conditions permit, an accurate muscle chart is made to define as far as possible the extent of the paralysis.

As soon as muscle tenderness has disappeared the affected limbs are put through their full range of movement at least twice daily by the Sister in charge. There is no doubt that in the past

the tendency was to keep patients immobilised too long and it is most gratifying to see the good results which have followed the simple regime outlined above.

Another important aspect is the psychological approach to the patient. In the beginning, older children and adults tend to be very depressed and apprehensive and a hopeful outlook and encouraging demeanour will do much to allay their secret fears, enabling them to co-operate with the doctors and nurses in securing the best possible results.

A NOTE ON THE TREATMENT OF RESPIRATORY FAILURE IN INFANTILE PARALYSIS.

In the writers view the mechanical respirator or "iron lung" is most disappointing in practice and severe respiratory failure occurring during the course of the disease is almost always fatal even when treated in one of these machines. In many cases life is only prolonged temporarily and the patient dies from some other causes, such as a massive collapse of the lung, pulmonary oedema, etc. In those cases where respiratory failure is of central origin, treatment in this apparatus is useless indeed, as one would expect. Only on one occasion have I seen a patient survive from a severe respiratory failure after treatment in the machine and the end result as regards extreme disability was so pitiable that from the humane point of view it is questionable whether it was ever worth it.

Why then were such glowing reports of their use reported daily?

Probably because many cases of mild respiratory failure were placed in the machine which would have recovered anyhow. Such cases have been observed here and have got better without mechanical aid. Only exceptionally is this mechanical respirator of value and often indeed it but adds to the terrors of the patient in his last illness. In the present state of knowledge the patient must be given every chance and the nursing of such patients is a demand on the skill and care of the staff. From experience gained in this hospital the following points should be noted when nursing such a case.

1. The apparatus must be kept under the care of a skilled electrician who is familiar with the whole of the working of the apparatus.
2. The patient requires continual re-assurance regarding his condition.
3. A catheter with continuous bladder drainage is necessary.
4. Both penicillin and sulphonamides should be administered in the acute stages, the former to combat respiratory, and the latter urinary infections.
5. Oxygen and an electrical suction apparatus should always be at hand, and the staff trained in their use.
6. In the event of an electrical failure, the attendants must be familiar with the alterations required for hand pumping.
7. It is best to make the patient as comfortable as possible without retention apparatus such as sand-bags, etc. These are liable to slip and jamb the cabinet, causing delay in closing the machine when it has been opened momentarily for nursing attention.
8. Considerable perseverance will be required in "weaning" the patient from the machine, as the technique of breathing will have to be re-learned.

In connection with the various patients nursed in the Respirator I should particularly like to mention the name of Mr. Collins of the Corporation Electricity Department, who has rendered devoted service and skill, day and night to maintaining the efficiency of the machine. Most of his off duty was spent 'standing-by' in case of trouble and his scrupulous care and attention has earned the thanks and gratitude of the patients and staff alike.

Venereal Diseases Treatment Centre

REPORT OF MEDICAL OFFICER.

General Remarks.

During the year 1,153 new cases presented themselves for diagnosis and treatment, 147 less than the previous year, but nevertheless, the second highest figure ever recorded, and far above the pre-war average. No sudden fall in incidence is to be expected for a considerable time, as the same causes alluded to in my last report, continue to operate.

In an endeavour to combat this as far as possible, increased work has been undertaken by the Almoner in order to trace where practicable the source of each infection, particularly with regard to syphilis. This has been very successful in a number of cases occurring within the locality. There is no doubt that the work of the Almoner is becoming increasingly important in an efficiently run clinic.

The tracing of individuals against whom a complaint has been made, and the tactful persuasion of defaulters to mend their ways is an essential part of the service.

Many patients cease attending for treatment through difficulties beyond their control and the visit of a tactful social worker, familiar with the other welfare facilities of the City will often solve their problems, thus enabling them to start or continue their treatment. A summary of the work done will be found under paragraph "Regulation 33 B".

In view of the numbers still seeking advice and treatment it is likely that additional clinic sessions will soon be required. This would be of special value to merchant seamen, who often stay in Port only a short time, and may find it difficult to come during the present treatment hours.

There have been no major advances in the treatment of venereal diseases and the scheme outlined in the last report continues to be entirely satisfactory.

"Regulation 33 B" ceased on 31st December, 1947, but contact tracing on similar lines will be continued.

Table "A". Gives the number of cases treated throughout the year, including transfers from other centres and referred cases.

Table " B ". Gives new cases of V.D. presenting themselves for the first time, and excludes cases treated previously at this or other centres.

Table " C ". Is a complete summary of the work of the clinic during the year.

Syphilis. 197 cases were treated during the year, 22 cases less than last year. The rate is still disturbingly high. 114 of the above cases were in the acute stage of infection and 111 cases were admitted to hospital for treatment, 45 males and 66 females.

69 cases are believed to have been infected in Plymouth during the year, 25 males and 44 females.

<i>Summary—</i>	<i>Males.</i>	<i>Females.</i>	<i>Total.</i>
New cases of syphilis who received initial treatment at this clinic during the year ...	58	89	147
Cases of syphilis under treatment at other centres who were transferred to this clinic during the year	36	14	50
	—	—	—
	94	103	197
	==	==	==

Gonorrhoea. 221 cases were treated during the year, a decrease of 76 on last year's figures. All were admitted to hospital for treatment. In addition 13 cases of transfers from other clinics required further treatment and were admitted.

Infections of the above disease believed to have been contacted in Plymouth are 98 males and 35 females.

Soft Chancre. Nine cases were treated.

Non-Venereal Conditions. A large number of cases attended for advice and treatment and no evidence of venereal disease was found :—

					<i>Male.</i>	<i>Female.</i>
Carcinoma of genitals	...	...	...	...	1	—
Scabies	...	...	...	...	6	2
Paraphimosis	...	...	...	...	7	—
Phimosis	...	...	...	...	5	—
Balantis	...	...	...	...	14	—
Non Specific Urethritis	...	...	...	...	17	—
Vaginitis	...	...	...	...	—	21
Herpes	...	...	...	...	2	—
Warts	...	...	...	...	3	—
W.R. for Adoption	...	...	...	...	5	9
Marriage Tests	...	...	...	...	8	3
Trichomonas	...	...	...	...	1	11
Thrush	...	...	...	...	—	9
Pediculi Pubis	...	...	...	...	5	—
Impetigo	...	...	...	...	1	1
Ringworm	...	...	...	...	1	—
Pityriasis Rosea, Eczema	...	...	...	...	—	—
Boils, Acne, etc.	...	...	...	...	19	4
Others, Chiefly for tests	...	...	...	...	297	249
					<hr/> 391	<hr/> 309
					<hr/> <hr/>	<hr/> <hr/>

Of the Non-specific infections Urethritis and Vaginitis, 52 cases were admitted to hospital for treatment—18 Males and 34 Females.

Defence Regulation 33b. The work of the Almoner :—

	<i>1946</i>	<i>1947</i>
	<hr/>	<hr/>
Number of cases reported on Form 1	32	115
Number of cases found and attended	16	63
Number of cases visited who refused to attend	6	3
Number of cases mentioned on Form 1 and untraced :—		
Through lack of Name, Addresses or description	10	49
Number actually served with Form 2	4	14

	<u>1946</u>	<u>1947</u>
Number prosecuted	1	3
Number awaiting prosecution	2	—
Number found free from infection although named on Form 1	4	8
Defaulters followed up	15	74

TABLE "A."—TOTAL NEW CASES FOR THE YEAR
(INCLUDING TRANSFERS FROM OTHER CENTRES).

Year	Syphilis				Chancroid				Gonorrhoea				Non-Venereal				Totals			
	Plymouth	Devon	Cornwall	Totals	Plymouth	Devon	Cornwall	Totals	Plymouth	Devon	Cornwall	Totals	Plymouth	Devon	Cornwall	Totals	Plymouth	Devon	Cornwall	Totals
1942	240	12	10	262	—	—	2	2	186	23	23	222	226	25	19	270	652	60	44	756
1943	282	11	8	301	—	—	—	—	146	19	8	173	405	52	53	510	833	82	69	984
1944	212	10	5	227	1	—	—	1	108	16	15	139	467	41	60	568	788	67	80	935
1945	112	5	5	122	—	—	—	—	130	24	14	168	538	65	59	662	780	94	78	952
1946	174	24	21	219	5	—	—	5	229	33	35	297	667	57	69	793	1075	114	125	1314
1947	171	13	13	197	8	1	—	9	202	24	21	247	597	50	53	700	978	88	87	1153

TABLE "B."—NEW CASES FOR THE YEAR
(EXCLUSIVE OF TRANSFERS)

<i>Year</i>	<i>Syphilis.</i>			<i>Gonorrhoea.</i>			<i>Totals</i>
	<i>Male</i>	<i>Female</i>	<i>Totals</i>	<i>Male</i>	<i>Female</i>	<i>Totals</i>	
1942 ...	45	49	94	111	80	191	285
1943 ...	32	50	82	91	40	131	213
1944 ...	18	59	77	70	55	125	202
1945 ...	18	34	52	92	48	140	192
1946 ...	64	63	127	189	40	229	356
1947 ...	58	89	147	163	58	221	368

TABLE "C"

	Syphilis.		Soft Chancere.		Gonorrhoea		Non-Venereal or Undiagnosed Conditions.	
	M.	F.	M.	F.	M.	F.	M.	F.
(1) Cases which were under treatment on January 1st, 1946	116	115	-	-	46	9	26	17
(2) Cases which came for the first time in the year	94	103	9	-	186	61	391	309
(3) Cases included under (2) which had already been treated for the same infection by civilian treatment centres, by Service authorities, or by other practitioners working under Circular 2226	36	14	-	-	23	3	-	-
(4) Of the cases in (2) less those in (3) the numbers with								
Syphilis, primary	37	62	-	-	-	-	-	-
Syphilis, secondary	5	10	-	-	-	-	-	-
Syphilis, latent in 1st year of infection	8	6	-	-	-	-	-	-
Syphilis, all later stages	4	7	-	-	-	-	-	-
Syphilis, congenital	4	4	-	-	-	-	-	-
Soft Chancere	-	-	9	-	-	-	-	-
Gonorrhoea, 1st year of infection	-	-	-	-	155	57	-	-
Gonorrhoea, later	-	-	-	-	8	1	-	-
Non-venereal conditions	-	-	-	-	-	-	-	-
Conditions remaining undiagnosed at 31st December, 1946	-	-	-	-	-	-	391	309
(5) The numbers which ceased to attend before completion of treatment were	2	2	-	-	17	26	-	-
(6) The numbers which ceased to attend after completion of treatment but before being passed as cured were	4	11	-	-	33	26	37	37
(7) The numbers transferred to other care were	27	9	2	-	40	5	20	3
(8) Number of cases discharged after completion of treatment and final test of cure or after diagnosis as non-venereal	31	11	6	-	65	11	344	272
(9) The numbers remaining on December 31st, 1946, either under treatment or under observation were	152	187	1	-	86	5	53	51
(10) The total attendances were	2925	2697	8	-	950	349	1363	1501 = 9763
(11) The cases in Item (4) resided in the Counties and County Boroughs (or Countries) in the case of persons residing elsewhere than in England and Wales) as shown at the heads of the different columns		PLYMOUTH		DEVON		CORNWALL		Total
Syphilis cases		133		9		5		147
Gonorrhoea cases		181		23		17		221
Soft Chancere cases		8		1		-		9
Non-venereal and undiagnosed cases		597		50		53		700
(12) The total attendances of all patients residing in each area were		8489		778		526		9793
(13) The numbers of specimens	68		3331	1858		467		350

Tuberculosis

REPORT OF THE TUBERCULOSIS OFFICER.

Notifications. During the year 1947, 351 cases were notified as suffering from Tuberculosis. This number included 297 Respiratory (175 males and 122 females) and 54 Non-Respiratory (24 males and 30 females).

This number shews an increase of 17 on the previous year.

The details of the notifications during 1947 are as follows :—

<i>Age Periods</i>	<i>Respiratory</i>		<i>Non-Respiratory</i>	
	<i>M.</i>	<i>F.</i>	<i>M.</i>	<i>F.</i>
0-1	—	—	—	—
1-5	2	1	3	1
5-15	8	8	7	5
15-25	61	53	8	11
25-35	36	32	4	6
35-45	36	16	2	4
45-55	11	8	—	—
55-65	12	—	—	1
65 and upwards	9	4	—	2
Totals ...	175	122	24	30

The numbers on the Notification Register at the end of the year were as follows :—

<i>Respiratory</i>			<i>Non-Respiratory</i>			<i>Total cases.</i>
<i>Males.</i>	<i>Females.</i>	<i>Total.</i>	<i>Males.</i>	<i>Females.</i>	<i>Total.</i>	
799	516	1315	166	212	378	1693

There were 16 Posthumous Notifications during the year. This number consisted of 10 Respiratory and 6 Non-Respiratory cases.

Deaths. One hundred and thirty cases who were on the Tuberculosis Dispensary Register died during 1947. This number shews an increase of forty on the previous year.

At the end of the year 1947, the following number of patients were on the " live " Dispensary Register.

	<i>Adults.</i>		<i>Children.</i>		<i>Totals.</i>
	<i>Males.</i>	<i>Females.</i>	<i>Males.</i>	<i>Females.</i>	
<i>Respiratory ...</i>	801	389	25	30	1245
<i>Non-Respiratory</i>	60	62	29	36	187
<i>Totals ...</i>	861	451	54	66	1432
	1312		120		

Dispensary. During the year 1947, 2,098 New Cases were sent to the Tuberculosis Dispensary by Medical Practitioners. This figure shews an increase of 352 on the previous year

The following table shews the number of cases referred to the Tuberculosis Officer each year since 1938 and the number of contacts who have been examined for the same period. The twenty-one contacts found to be suffering from tuberculosis are included in the figure of three hundred and eleven New Cases found to be definitely tuberculous.

<i>New Cases.</i>					<i>Contacts.</i>			
<i>Year.</i>	<i>Definitely Tuberc.</i>	<i>Non-Tuberc.</i>	<i>Diagnosis not completed</i>	<i>Total examined</i>	<i>Definitely Tuberc.</i>	<i>Non-Tuberc.</i>	<i>Diagnosis not completed</i>	<i>Total examined</i>
1938	232	707	104	1043	7	362	41	410
1939	297	721	108	1126	4	376	13	393
1940	247	677	123	1047	10	377	31	508
1941	208	585	53	846	5	163	4	172
1942	274	744	57	1075	5	224	7	236
1943	297	1015	90	1402	4	309	25	338
1944	260	1077	81	1418	12	378	10	400
1945	340	987	154	1481	10	461	9	480
1946	327	1265	154	1746	23	623	65	711
1947	311	1520	267	2098	21	807	7	835

Attendances. The number of attendances of patients at the Tuberculosis Dispensary during the year, excluding those who attended for X-ray examination, and which are shewn elsewhere, totalled 16,618.

Since 1938 the attendances have been as follows :—

1938	...	...	...	...	9,638
1939	...	...	...	...	9,233
1940	...	...	...	...	8,599
1941	...	...	...	...	5,709
1942	...	...	...	...	7,270
1943	...	...	...	...	8,942
1944	...	...	...	...	9,506
1945	...	...	...	...	11,550
1946	...	...	...	...	14,007
1947	...	...	...	...	16,618

Evening Clinic. This clinic still continues to increase and further adjustments may have to be put in operation if it gets much larger.

Domiciliary Visiting. *Tuberculosis Officer.* The Tuberculosis Officer paid 552 visits to patients at their homes or at hospitals.

Nurses and Health Visitors. The Tuberculosis Health Visitors and Three Towns Nurses paid 4,012 visits to patients during the year.

Consultations. The following consultations were held by the Tuberculosis Officer during the year :—

Personal	...	...	...	...	43
Other than personal (T145)	...	...	...	...	1903

Special Forms of Treatment. The Tuberculosis Officer gave the following special forms of treatment at the Dispensary during the year :—

Artificial Pneumo-thorax refills	...	...	1507
Injections of Tuberculin	...	...	1105

X-ray. The number of X-ray examinations made during the year amounted to 7,010. The following table shews the number of examinations made each year since 1938 :—

1938	...	...	...	...	...	3,344
1939	...	...	...	...	...	3,381
1940	...	...	...	...	...	3,617
1941	...	...	...	...	...	2,941
1942	...	...	...	...	...	3,901
1943	...	...	...	...	...	3,394
1944	...	...	...	...	...	4,097
1945	...	...	...	...	...	5,313
1946	...	...	...	...	...	4,408
1947	...	...	...	...	...	7,010

Bacteriological Work. The number of specimens of sputa, etc., which were tested during the year amounted to 1,198. The following table shows the number of specimens sent for examination since 1938 :—

1938	...	...	...	...	...	1,370
1939	...	...	...	...	...	1,259
1940	...	...	...	...	...	1,210
1941	...	...	...	...	...	762
1942	...	...	...	...	...	935
1943	...	...	...	...	...	1,036
1944	...	...	...	...	...	956
1945	...	...	...	...	...	1,138
1946	...	...	...	...	...	1,195
1947	...	...	...	...	...	1,198

Institutional Treatment. Throughout the year there has been a long "Waiting List" of cases awaiting admission to Didworthy Sanatorium, Mt. Gold Hospital and Swilly Hospital for treatment.

This is the most heartbreaking part of our work, and the staff at Beaumont House find it most disappointing to have to tell these patients time and again that there is not yet a bed for them.

At the present moment there are 218 beds for the treatment of Pulmonary Tuberculosis at Didworthy Sanatorium, Mt. Gold Hospital and Swilly Isolation Hospital. This number is insufficient for our present requirements.

Voluntary Organisations. *Tuberculosis Care and After-Care Committee.* The work of this committee still continues to expand. More cases have been helped and more money has been expended than in any previous year.

During the year the Committee organised a summer outing to the seaside for the children of patients, and also a Christmas Party. Both these functions were a great success.

Council of Social Service. This organisation works harmoniously with the Tuberculosis Care and After-Care Committee and has been most helpful in providing the Tuberculosis Dispensary with a fair share of the gift parcels from overseas, for distribution to Tuberculous patients and their families.

Allowances and Grants. The details of the work carried out under Memorandum 266/T during the year are as follows :—

186 applications for financial assistance were dealt with from those having institutional or domiciliary treatment, as given in the following table :—

Didworthy Sanatorium	...	...	...	29
Mount Gold Hospital	...	...	...	17
The City Hospital	...	...	...	1
City Isolation Hospital	...	...	...	3
Leicester Isolation Hospital	...	...	...	1
Frenchay Hospital	...	...	...	2
Domiciliary :—				
Waiting admission to institutions	...	...	...	85
Discharged from institutions	...	...	...	40
Treatment at home (Observation)	...	...	...	8
				—
				186
				==

One hundred and seventy-three applicants were eligible to receive allowances, and financial assistance was granted in respect of the undermentioned classes of payments :—

Maintenance Allowances	...	...	...	132
Maintenance and Discretionary Allowances				5
Discretionary Allowances	...	...	...	5
Special Payments	...	...	...	31
				—
Total	...	...	...	173
				==

Discretionary Allowances were granted in response to applications for :—

Rent	...	...	...	...	...	3
Rent and insurance premiums	...	...	...	...	...	2
Insurance premiums	...	...	...	...	...	3
Rent, insurance premium and education of child	...	...	...	...	...	1
Insurance premium and hire purchase	...	...	...	...	...	1
						—
Total					...	10
						==

Special payments granted were made in respect of applications for :—

Pocket Money Allowances	...	...	...	...	...	26
Domestic Help	...	...	...	...	...	2
Travelling Expenses of near relatives	...	...	...	...	...	1
Rent and pocket money allowances	...	...	...	...	...	2
						—
Total					...	31
						==

Ninety-five variations in payments were made to applications on account of various changes in circumstances.

Amounts of allowances paid :—

			£	s.	d.
Maintenance Allowances ...	...		6632	13	10
Discretionary Allowances		...	104	12	11
Special Payments ...	...	...	335	8	0
			<hr/>		
			£7072	14	9
			<hr/>		

This total payment shews an increase over last year's expenditure of more than £1,500.

There were 50 more applications for financial assistance and 47 more patients were eligible to receive allowances and financial assistance.

TUBERCULOSIS—NOTIFICATIONS AND DEATHS FROM—PLYMOUTH, 1914-1947 :

and Attack Rate and Mortality per 1,000 population.

YEAR.	PULMONARY TUBERCULOSIS.				NON-PULMONARY TUBERCULOSIS.				TUBERCULOSIS (ALL FORMS).			
	<i>New Cases.</i>	<i>Attack Rate.</i>	<i>Deaths.</i>	<i>Mortality.</i>	<i>New Cases.</i>	<i>Attack Rate.</i>	<i>Deaths.</i>	<i>Mortality.</i>	<i>New Cases.</i>	<i>Attack Rate.</i>	<i>Deaths.</i>	<i>Mortality.</i>
1914	370	1.74	262	1.23	131	.62	80	.37	501	2.36	342	1.60
1915	322	1.71	236	1.26	88	.47	84	.45	410	2.18	320	1.71
1916	376	2.04	254	1.37	166	.90	65	.35	542	2.94	319	1.72
1917	364	2.03	243	1.25	103	.57	89	.49	467	2.60	332	1.74
1918	417	2.32	300	1.67	130	.72	89	.49	547	3.04	389	2.16
Average	369	1.97	259	1.35	123	.65	91	.43	493	2.62	340	1.78
1914-1918												
1919	266	1.46	231	1.27	74	.41	73	.40	340	1.87	304	1.67
1920	189	1.00	195	1.03	40	.21	46	.24	229	1.21	241	1.27
1921	370	1.85	208	1.04	117	.59	42	.21	487	2.44	250	1.25
1922	395	1.97	218	1.09	92	.46	48	.24	487	2.43	266	1.33
1923	346	1.79	202	1.04	119	.61	44	.23	465	2.40	246	1.27
Average	313	1.61	211	1.09	88	.45	50	.26	401	2.07	261	1.36
1919-1923												
1924	294	1.52	209	1.08	92	.48	43	.22	386	2.00	252	1.30
1925	389	1.97	179	0.91	103	.52	44	.22	492	2.49	223	1.13
1926	443	2.36	177	0.95	116	.62	34	.18	559	2.98	211	1.13
1927	358	1.91	182	0.97	115	.61	31	.16	473	2.52	213	1.13
1928	325	1.73	159	0.85	111	.59	32	.17	436	2.32	191	1.02
Average	361	1.89	181	0.95	107	.56	36	.19	469	2.46	218	1.14
1924-1928												
1929	300	1.51	166	0.84	78	.39	24	.12	378	1.90	190	0.96
1930	252	1.27	167	0.84	76	.38	33	.17	328	1.65	200	1.01
1931	320	1.67	157	0.69	62	.32	38	.20	382	1.99	195	0.89
1932	273	1.31	162	0.78	70	.33	31	.15	343	1.64	193	0.93
1933	253	1.22	178	0.86	58	.28	24	.12	311	1.50	202	0.98
Average	279	1.39	166	0.90	69	.34	30	.15	348	1.73	196	0.95
1929-1933												
1934	246	1.21	167	0.82	63	.31	35	.17	309	1.52	202	0.99
1935	217	1.07	114	0.56	54	.26	30	.15	271	1.33	144	0.71
1936	204	.98	125	0.60	51	.25	27	.13	255	1.23	152	0.73
1937	225	1.07	147	0.70	52	.25	15	.07	277	1.32	162	0.77
1938	209	.98	135	0.64	42	.20	27	.13	251	1.18	162	0.77
Average	220	1.06	137	0.66	52	.25	27	.13	272	1.31	164	0.79
1934-1938												
1939	194	.90	138	0.64	51	.24	25	.12	245	1.14	163	0.76
1940	192	.97	163	0.83	62	.31	25	.13	254	1.28	188	0.96
1941	194	1.30	141	0.94	42	.28	22	.15	236	1.58	163	1.09
1942	243	1.89	121	0.95	57	.44	30	.23	300	2.33	151	1.18
1943	240	1.76	126	0.92	56	.41	28	.20	296	2.17	154	1.12
Average	212	1.36	137	0.85	53	.33	26	.16	266	1.70	164	1.02
1939-1943												
1944	233	1.61	124	0.86	38	.26	18	.12	271	1.87	142	0.98
1945	289	1.83	125	0.79	49	.31	16	.10	338	2.14	141	0.89
1946	284	1.61	105	0.60	50	.28	25	.14	334	1.89	130	0.74
1947	297	1.68	141	0.77	54	.29	30	.16	351	1.93	171	0.93

Dental Department—Public Health

REPORT OF THE DENTAL SURGEON.

The work of the Department has been much the same as in previous years. From the accompanying table it will be seen that there has been a general increase in the number of attendances and operations performed, compared with 1946, the most outstanding being the increased number of orthodontic appliances constructed for the School Dental Department.

The patients attending the clinic have in the main been mothers and children attending the Maternity and Child Welfare Department, Tuberculosis patients attending the Dispensary, members of the Police Force, patients referred by the District Medical Officers of the Social Welfare Committee, and children attending the Nurseries at Hoegate, Queens Gate and Nelson Gardens. Regular routine and emergency visits have been made to the City, Didworthy, Mount Gold, and Swilly Hospitals, for the treatment of patients unable to attend the clinic and for operations necessitating hospital treatment.

As this will be the last year in which the Department will be administered as a separate unit, it may be of interest to give a resume of the growth of the Department since it was first inaugurated in 1930, with the appointment of a full-time Dental Officer, Technician and attendant.

The clinic was originally intended for treatment of patients attending the Tuberculosis and Maternity and Child Welfare Departments ; but by degrees the original framework of the scheme has been filled in, and now the Department is available for all patients for whom the Public Health Committee is responsible, and school children for special treatment which is not available at the school clinics ; from time to time activities have been extended.

With the abolition of the Board of Guardians in 1931, the City Hospital and persons receiving Public Assistance were brought into the Scheme. The number of attendances from this source, as can be expected, reached its peak in 1938.

Since the opening of the Orthopaedic Hospital at Mount Gold, regular visits have been made there and at times the acrobatic abilities of the Dental Officer have been severely taxed during the

operations on patients encased in splints and confined to somewhat unusual positions.

Members of the Police Force were added in 1934. At first treatment could only be given on the recommendation of the Police Surgeon. It was early realised that for the service to be of real value a scheme of regular routine inspection and treatment was necessary. Two years ago such a scheme was adopted and has proved very satisfactory, more than 50% of the officers having voluntarily taken advantage of the arrangement.

A new and interesting extension began in 1936 with the regular inspection of the children at the Margaret McMillan Nursery School. This in the last few years has been extended to the Nelson Gardens and Queens Gate Nurseries.

In 1937 children from the Holy Cross School, which is almost adjacent to Beaumont House, were added to the list of patients. This was discontinued in 1940 owing to future uncertainties, but commenced again in 1942, with the addition of Treville Street School.

During the War years when for various reasons the number of patients from regular sources fluctuated, those from other sources took their place. The chief departures from the normal were Canadian Fire Fighters, the treatment of Service men and women and Air Raid Casualties, under the Emergency Medical Scheme, at the City Hospital, where the Ministry of Health provided a complete Dental Surgery, now used as a school clinic, visits to the Deaf and Dumb School with mobile equipment and excursions with the mobile Dental Unit into Devon as far as Salcombe and Tideford in Cornwall. The Mobile Unit was later lent to the Cornwall County Council, and, when dismantled at the end of the War, the equipment and instruments available made possible the opening of the Honicknowle School Dental Clinic.

During the years the equipment and range of instruments have been gradually improved and were probably above the average of those found in a municipal clinic. At the beginning of 1947 the surgery and dental laboratory were completely re-equipped from the U.S.A. Manadon Hospital, with a modern operating unit, commodious cabinet and increased range of instruments and Dental X-Ray machine in the surgery and a stainless steel Prosthetic Unit in the laboratory ; both are now undoubtedly fitted out in a manner which the local authority may be proud.

The increased scope of dental treatment for mothers and young children, which the new Health Service Act imposes upon Local Authorities, has, it will be realised from this resume, been in operation in Plymouth for some years and the foundations laid down should very easily be expanded to meet future requirements.

ANNUAL REPORT, 1947.
DENTAL CLINIC, BEAUMONT HOUSE.

<i>Department.</i>	<i>New Patients seen</i>	<i>Attendances.</i>	<i>Permanent Extractions.</i>	<i>Temporary Extractions.</i>	<i>Local Anaesthetic.</i>	<i>General Anaesthetic (Simple).</i>	<i>General Anaesthetic (Prolonged).</i>	<i>Fillings.</i>	<i>Scalings.</i>	<i>Dentures Made.</i>	<i>Dentures Repairs.</i>	<i>Appliances Made.</i>	<i>Other Operations.</i>
Maternity and Child Welfare	460	1094	743	334	91	93	71	259	74	67	12	—	403
Tuberculosis	100	631	224	2	85	1	6	309	72	39	13	—	—
City Hospital	56	71	76	—	23	—	5	18	2	3	—	3	25
Members of City Police Force	43	370	106	—	36	—	2	159	80	34	7	—	154
Social Welfare Cases ...	34	172	226	—	29	—	12	8	4	46	11	—	91
School Medical	—	—	—	—	—	—	—	—	—	32	17	132	—
TOTALS	693	2338	1375	336	264	94	96	753	232	221	60	135	675

VISITS TO INSTITUTIONS.

Didworthy	24	Swilly Hospital ...	6
Mount Gold	25	Day Nurseries ...	4
City Hospital	42		

Mount Gold Hospitals

REPORT OF THE MEDICAL SUPERINTENDENT.

THE ORTHOPÆDIC HOSPITAL.

Of the plans that have been submitted for the construction of out-patients, fracture and physiotherapy departments, for enlargement of the existing operating theatre unit and for an administrative block, those for the out-patient department have been approved in principle as the first phase of building.

The Orthopaedic Hospital consists of three wards of 120 beds ; two large wards of 46 beds each, being occupied by adults, and the small ward of 28 beds by children.

The following table compares the work of the hospital in post-war years with pre-war years :—

<i>Cases admitted.</i>				1947	1946	1938	1937
Tuberculosis of bones and joints ...				103	90	72	85
Poliomyelitis—acute				22	2	—	—
chronic				14	11	12	11
Congenital deformities				52	53	64	70
After results of injuries				30	51	56	49
Osteomyelitis—acute				8	11	—	—
chronic				30	9	10	5
Chronic arthritis				55	29	50	43
Rickets				5	—	15	—
Peripheral nerve injuries				3	8	6	—
Fractures				144	214	—	—
Other conditions				151	136	35	29
Total admissions				617	614	314	311
Operations and manipulations							
under anaesthesia				504	570	269	212
Physiotherapy treatments				12,367	10,408	8,859	7,342
X-Ray examinations				2,475	1,903	651	446
Out-patient consultations				3,839	4,324	899	658

The number of patients admitted during the year was 617, the total number of patient days being 34,915 and the average bed occupation 96. This includes 58 E.M.S. cases, accounting for 3,385 patient days and an average bed occupation of 9.

The waiting list on the 31st December, 1947, was 64.

Acute fracture cases are received at the request of the City and Prince of Wales's Hospitals.

The number of cases admitted under the provision of the Plymouth and South-West Hospitals Contributory Scheme was 173, and 67 Plymouth school children admitted under the provisions of the Education Act, 1944.

Admissions for the past five years are tabulated for comparison :—

<i>Plymouth Cases.</i>	1947	1946	1945	1944	1943
Tuberculosis Department	49	75	68	58	61
M. & C.W. Department	—	—	5	7	8
School Medical Department	67	96	19	6	18
Other Plymouth Cases	302	214	180	127	148
Total Plymouth Cases	418	385	272	198	235
<i>Non-Plymouth Cases.</i>					
Devon County Council ...	56	54	34	24	19
Cornwall County Council	28	7	5	9	13
Devonian Orthopædic Association ...	5	5	1	—	4
Other Cases ...	52	32	17	8	16
Total Non-Plymouth Cases	141	98	57	41	52
<i>E.M.S. Cases</i>					
Service ...	28	87	132	129	178
Civilian ...	30	44	51	50	90
Total E.M.S. Cases ...	58	131	183	179	268
Grand Total of Admissions	617	614	512	418	555
Total Discharges ...	610	667	513	439	554

Operating Theatre.

A total of 504 operations and manipulations were performed during the year. The classification of operations being as follows :—

<i>Classification of Operation</i>	<i>Ordinary</i>	<i>E.M.S.</i>
Arthrotomy	3	25
Arthroplasty	6	—
Arthrodesis	36	—
Amputations	7	—
Spinal Bone Graft	22	—
Operative reduction of fractures	48	—
Manipulative reduction of fractures	36	—
Manipulations under anæsthesia	57	—
Other operations	264	—

The following is a summary of the work of the last five years :—

	1947	1946	1945	1944	1943
Surgical Operations	447	391	270	208	183
Manipulations under anæsthesia	57	179	54	99	139
Aspirations	14	12	7	19	57
Pathological Examinations ...	15	10	120	145	159

**X-Ray
Department.**

The new Watson “ Roentgen Four ” unit has been supplied and is now in use and giving very satisfactory service.

A total of 2,475 X-rays were taken and 4,704 films were used. An analysis of the work is given below :—

	1947	1946	1945	1944	1943
Tuberculosis Department ...	465	463	335	338	284
School Medical Department	301	105	88	90	65
M. & C.W. Department ...	132	73	38	48	26
Other Plymouth Cases	1026	920	376	410	464
Devon County Council	49	12	13	22	39
Cornwall County Council ...	46	4	7	7	12
E.M.S.	35	186	383	520	739
Others	421	140	28	48	88
Totals	2475	1903	1268	1483	1707

Orthopaedic Clinics.

Mr. Capener holds an out-patient clinic on the fourth Friday of each month, and Mr. Lillie on each Tuesday and Thursday afternoon. The Tuesday clinic is predominantly a fracture clinic. The Thursday afternoon clinic is held temporarily in the Astor Institute pending the provision of an out-patient department.

The following table shows the number of out-patient attendances during the past four years :—

	1947	1946	1945	1944
Number of initial examinations				
by the surgeons	477	441	278	285
Number of subsequent examinations by the surgeons ...	3362	3883	1643	1435

Patients who attended during 1947 :—

	<i>New Patients.</i>	<i>Old Patients.</i>
Tuberculosis Department	3	357
M. & C.W. Department	77	121
School Medical Department	39	468
Other Plymouth Cases	305	1851
Plymouth Public Assistance	5	5
Devon County Council	3	84
Devonian Orthopædic Association	—	7
Cornwall County Council	1	29
E.M.S.	17	239
Private	25	175
Others	2	26

Physiotherapy Department.

A Chief Physiotherapist and four assistants are fully employed in this department, but their work is hampered by the limited space available.

The following table gives details of the work of the department for the year 1947 :—

<i>Physiotherapy Treatments.</i>	<i>In-Patients.</i>	<i>Out-Patients.</i>
Number of patients treated	269	662
Number of treatments given	5859	6508
Number of patients admitted	273	581
Number of patients discharged	235	273
Average number of patients treated per month	53	185
Average number of treatments given per month	488	542

The table shows the various departments from which the patients were sent :—

	<i>In-Patients.</i>	<i>Out-Patients.</i>
Tuberculosis Department	28	25
M. & C.W. Department	4	59
School Medical Department	11	47
Other Plymouth Cases	152	466
Devon County Council	16	6
Cornwall County Council	8	8
Devonian Orthopædic Association	1	—
Staff	5	6
Others	24	13
E.M.S.	20	32

Plasters.

Number of plasters applied :—

In-patients	703
Out-patients	317

Orthopaedic Hospital School.

Classes are held in the Children's Ward, and for older girls of school age in the Women's Ward. The School re-opened on the 13th January, 1947, with 33 pupils (24 girls and 9 boys). During the year there were 74 new entries (29 boys and 45 girls) making a total of 107 children who received instruction during the year. Of these, 78 were discharged, leaving 29 on the register on the 19th December. Of the 107 who attended school during the year 69 were of normal school age and 38 of nursery school age.

The school was opened 383 times with a total attendance of 7,396, making an average attendance of 19.03 out of a possible attendance of 19.78.

A link with outside activities is maintained through the Leaders of the Girl Guides, Brownies and Scout Troops.

Occupational Therapy. During the year 385 patients received training in Occupational Therapy. 3,627 articles have been made. The scope of the work is limited by its having to be carried out in the Wards, and is confined to stool seating, leatherwork, plastic work, lampshade making, embroidery, glove making, weaving, toy making, felt work, rug making and dressmaking.

Training School for Nurses.

		<i>Entered.</i>	<i>Successful.</i>
Preliminary State Examination	...	15	13
Orthopaedic Final Examination	...	6	4
Tuberculosis Association Examination		3	3

Comprehensive Training Scheme for Nurses.

A total of 19 Female and 11 Male Student Nurses have spent an average of 3 months each in the Orthopaedic Hospital.

PULMONARY TUBERCULOSIS HOSPITAL.

83 beds are available. 56 for men and 27 for women.

Admissions. 104 patients were admitted during the year, 75 men and 29 women. Of these 104 patients, 44 remained in hospital at the end of the year, 37 had died, 20 were discharged home, 2 transferred to the Sanatorium, and 1 to the City Hospital.

The total number of in-patient days was 29,260, and the average bed occupation was 80.

Discharges. The total number of discharges during the year was 56. A comparison of the clinical condition of patients admitted, and patients discharged, using the Ministry of Health classification is as follows :—

	Q.	A1.	A2.	A3.	B1.	B2.	B3.
Admissions ...	—	1	4	7	2	16	74
Discharges ...	27	2	3	—	—	6	18

Compared with previous years the figures are as follows :—

	1947	1946	1945	1944	1943
Admissions	104	125	147	125	136
Discharges	56	79	96	48	47
Deaths	51	37	57	57	50

Specialised Treatment.

	(1)	(2)
	<i>Artificial</i>	
	<i>Pneumo-</i>	<i>Pneumo-</i>
	<i>thorax.</i>	<i>peritoneum.</i>
Number of patients treated	27	32
Number of inductions	9	19
Number of refills given	546	566
3. <i>Phrenic Crush.</i> Number of operations performed		7
Number of patients under treatment combined with pneumoperitoneum ...		13
4. <i>Thoracoplasty.</i> Number of cases transferred and operated on at Frenchay Park Hospital, Bristol		5
5. <i>Aspirations.</i> Number of cases in which it was necessary to aspirate effusion from the pleural cavity		9

The Consulting Thoracic Surgeon visits the hospital, or cases are referred to his clinic at the Prince of Wales's Hospital on the first Tuesday of each month. His opinion has been obtained in fourteen cases, five of whom were subsequently transferred to Frenchay Hospital for Thoracic Surgery.

The Consulting Orthopaedic Surgeon visits the Pulmonary Tuberculosis wards as required. During the year five cases were under his supervision in this hospital, but none of these was transferred to the Orthopaedic Hospital.

The advantages of having pulmonary tuberculosis wards annexed to an orthopaedic hospital are obviously great. It is felt that there is scope for development on a regional basis of an orthopaedic ward with suitably trained nursing staff for cases with associated open pulmonary tuberculosis.

Routine X-Ray Examinations are carried out at Beaumont House. Screening and X-Ray examination of urgent and orthopaedic cases are made at the hospital.

Pathological Examinations—608 specimens, of which 555 were sputum were sent to the Pathological Department of the Prince of Wales's Hospital.

Occupational Therapy. This continues to be popular amongst many patients and the demand is ahead of the supply of materials and instruction in this form of therapy.

The Library increased in size owing to the setting up by the City Librarian of a fresh library for the Orthopaedic Hospital, releasing numerous good volumes from that library for use in the Pulmonary Tuberculosis Wards.

Great appreciation is shown of the work of Miss Jago, the Honorary Librarian, in the selection and distribution of books to the patients.

The British Red Cross Picture Library Scheme was commenced towards the end of the year, and the pictures shown are appreciated by some of the patients. Mr. Mann of the School of Art has stimulated interest in Art by his talks to the patients.

Thanks are expressed to the After-Care Committee for their continued interest, and help afforded to the patients.

Didworthy Sanatorium

REPORT OF THE MEDICAL SUPERINTENDENT.

Total beds available—107 (61 for men and boys and 46 for women and girls).

Admissions. The total number of admissions for the year was 123 ; 66 men, 51 women, 4 boys and 2 girls, of whom 119 were sent by the City of Plymouth, and 4 (2 men and 2 women) were sent by the County of Cornwall.

Classification of Admissions :—

Respiratory Cases.

(Tubercle bacilli absent)					<i>Men.</i>	<i>Women.</i>	<i>Boys</i>	<i>Girls.</i>
Group 1	...	...	...	...	12	6	4	1
Group 2	...	...	...	...	12	16	—	—
Group 3	...	...	...	...	3	1	—	—
(Tubercle bacilli present)								
Group 1	...	...	...	...	10	5	—	—
Group 2	...	...	...	...	24	17	—	—
Group 3	...	...	...	...	5	5	—	—

Non-Respiratory Cases — 1 — 1

N.B.—Of the cases admitted R/A, 17 were found to be R/B cases on investigation at the Sanatorium, this represents 30.9% of the R/A cases admitted, and 13.82% of the total number of patients admitted during the year.

Discharges. The total number of discharges for the year was 125 ; 67 men, 47 women, 6 boys and 5 girls, of whom 117 were City of Plymouth cases, and 8 (6 men and 2 women) were County of Cornwall cases.

Classification of Discharges :—

					<i>Men.</i>	<i>Women.</i>	<i>Boys.</i>	<i>Girls.</i>
Respiratory Tubercle Bacilli absent cases.	Group 1	Quiescent	...	...	5	8	6	2
		Very much improved			1	2	—	1
		Not improved	...		—	—	—	—
	Group 2	Quiescent	...	...	11	7	—	1
		Very much improved			—	3	—	—
		Not improved	...		—	—	—	—
	Group 3	Quiescent	...	...	—	—	—	—
		Very much improved			1	1	—	—
		Not improved	...		—	—	—	—
	<i>Carried forward</i>				...	18	21	6 4

		<i>Brought forward</i>	...	18	21	6	4
	Group	Quiescent	...	2	—	—	—
	1	Very much improved		2	—	—	—
		Not improved	...	—	—	—	—
Respiratory							
Tubercle	Group	Quiescent	...	10	2	—	—
Bacilli	2	Very much improved		22	12	—	—
present		Not improved	...	3	3	—	—
cases.							
	Group	Quiescent	...	—	—	—	—
	3	Very much improved		5	4	—	—
		Not improved	...	3	3	—	—
Non-		Quiescent	...	—	1	—	—
Respiratory		Very much improved		—	—	—	—
cases.		Not improved	...	—	—	—	1
Deaths	...	...	...	2	1	—	—
				67	47	6	5

Summarising this we get the following :—

44.0% cases discharged “ Quiescent.”

43.2% cases discharged “ Very much improved.”

10.4% cases discharged “ Not improved.”

2.4% cases died in the Institution.

The total number of patients treated during the year was 223.

Bed Occupation.

The total number of patient days for the year was 37,133. An average struck over the whole year

shows the average bed occupation to have been 101.73 patients each day.

The average length of stay of cases discharged during the year was 284.088 days.

The total number of bed patient days was 22,468, which represents 60.5% patients in bed daily of the total number of cases treated.

Pathological Tests.

The total number of sputum examinations during the year was 513.

The total number of urine examinations during the year was 310.

The total number of Erythrocyte Sedimentation tests during the year was 705.

Other pathological examinations such as Pleural fluids, etc., during the year was 61.

Specialised Treatments.

(a) *Artificial Pneumothorax Therapy.*

Total number of patients treated during the year	52
Total number of attempted inductions	26
Number of successful inductions	20
Number of unsuccessful inductions	6

(Due to adherent Pleura.)

This has necessitated a total of 685 refills.

N.B.—Three of the above cases were bilateral Artificial Pneumothorax cases.

(b) *Pneumoperitoneum Therapy.*

During this year we induced Pneumoperitoneum in 25 patients.

In 20 of these cases the Pneumoperitoneum was combined with Phrenic Crush.

This form of treatment has necessitated 910 refills.

(c) *Phrenic Crush*—24 cases.

(d) *Thoracoplasty*—11 cases.

These patients were temporarily transferred to Frenchay Hospital, Bristol, for this operation, under the care of Mr. Ronald Belsey, the Thoracic Surgeon.

(e) *Division of Adhesions.*

Number of division of adhesions in cases of Artificial Pneumothorax—4.

(f) *Aspirations of Chest.*

Aspirations of Chest for Pleural effusions, etc., 23.

(g) *Aurotherapy.*

During the year we treated 11 patients by injections of gold salts (Aurotherapy).

(h) *Tuberculin Injections.*

During the year we have treated a number of non-respiratory tuberculous lesions by the above method.

Treatment Block.

ment :—

X-Ray Department.—During the year the following work was undertaken by our X-Ray Department :—

X-Ray films of chest	...	...	...	...	862
X-Ray films of other organs—bones, etc.	...	...	...	...	40
Total number of Screen examinations	...	...	...	...	1870

We have been presented by the relatives of an ex-patient with £65 which will enable us to purchase a Tomograph Attachment for the X-Ray apparatus.

This attachment is now on order and we expect delivery at any time.

Ear, Nose and Throat Treatment.—Mr. Howarth, Consulting Ear, Nose and Throat Surgeon, holds a session at the Sanatorium at least once a month.

The number of patient examinations undertaken by Mr. Howarth during the year was 96.

Dental Clinic.—The Treatment Block is now equipped with a Dental Clinic complete with a Ritter Unit.

Mr. A. Maughan, L.D.S., attends at the Sanatorium once a fortnight, and all new patients have dental inspections and appropriate dental treatment is given.

In view of the many calls on the services of the Dental Surgeon by other Hospitals and Departments it has not been possible to have his services for more than one day per fortnight, but I am of opinion that a full day session per week is required to deal adequately with the dental defects we find in our patients, and obviate the long waiting period between dental inspection and treatment owing to the number of patients needing and wishing to avail themselves of the services of a Dental Surgeon.

The following is a resume of dental treatment undertaken at the Sanatorium during the year :—

Patients treated	...	...	...	...	...	71
Attendances	...	...	...	...	...	253
Extractions	...	...	...	...	...	31
Local Anaesthetics	...	...	...	...	...	22
Fillings	...	...	...	...	...	72
Scalings	...	...	...	...	...	32
Dentures	...	...	...	...	...	10
Other Operations	...	...	...	...	...	71

**Occupational
Therapy.**

As the patient's health improves, the urge and desire comes to undertake something to relieve the boredom of bedrest, and to this end a programme is evolved to encourage the patient to interest himself or herself in handicraft work and thus proceed through easy stages to a return to normal working life.

When the patient is considered fit enough, he or she is permitted to undertake interesting handicraft work under the experienced guidance of our Handicrafts Instructor. For the first stage the patient is invited to choose a handicraft of a light nature which may be undertaken while the patient rests in bed, such as tapestry work, rug-making, leatherwork, soft toy-making and needlecraft of all kinds. When the patient is fit enough to get up all day he commences a further stage which entails more exercise with the ultimate object of being able to undertake a normal working life on his discharge from the Sanatorium.

The men patients have undertaken the repair of much of the Sanatorium furniture and constructed many new articles for use in the Sanatorium, which includes medicine cupboards, bed tables, bathroom stools, card tables, cupboards, etc., and bedside table lamps for the Nurses' Home.

Classes are held for the women patients who are up on graded exercise each afternoon, and their interest enthusiasm and skill in woodwork is most noticeable and encouraging to the Handicrafts Instructor.

**Patients'
Entertainment.**

Patients' entertainment has been well catered for this year.

With the accrued dividends of the Bolitho Trust Fund we purchased a Gaumont British Sound Film Projector in the latter part of 1946, and we have been able to give weekly film exhibitions for the patients and staff throughout the year.

We have had a small number of Concert Parties, but the patients express a decided preference for film shows, and we have been able to give them very good programmes.

A mixed Whist Drive has been held for the patients every fortnight, the cost of the prizes, which are given in the form of Savings Stamps, is defrayed by the Patients' Canteen Fund.

Mrs. Raikes, the Local Organiser of the British Red Cross Society visits the Sanatorium each week, and I should like to express our appreciation of the many kindnesses shown to the patients by the British Red Cross Society as represented by Mrs. Raikes.

Many comforts for our Service patients have also been supplied through the kind offices of Major C. S. Griffin, O.B.E., the Military Registrar for this District.

He or his representative visits the Institution once a week and helps or advises where necessary, all our Service cases.

**Staff
Bungalows**

During the year the construction of eight bungalows on the site recently purchased opposite the Sanatorium has been completed.

These bungalows are occupied by married members of the staff.

The City General Hospital

REPORT OF THE MEDICAL SUPERINTENDENT.

The following table summarises certain statistics of a general nature on the work of the City General Hospital during the year ended 31st December, 1947 :—

(1)	Number of admissions, including infants born in the Hospital	...	...	...	...	5855
(2)	Number of discharges	...	...	...	...	5338
(3)	Number of deaths	...	...	...	...	509
(4)	Patients treated to a conclusion	...	...	...	...	5847
(5)	Duration of stay of patients treated to a conclusion :					
	(a) Under four weeks	...	...	...	...	5181
	(b) Over four weeks and under thirteen weeks	...	...	...	...	556
	(c) Thirteen weeks or more	...	...	...	...	110
(6)	In-patient days	...	...	...	...	119,698
(7)	Average duration of stay	...	...	...	20.4 days	
(8)	Number of available beds	...	...	...	...	395
(9)	Number of beds occupied :					
	(a) Average	...	...	...	...	328
	(b) Highest—on 5/2/47	...	...	...	...	395
	(c) Lowest—on 1/7/47	...	...	...	...	250
(10)	Number of women confined in Hospital	...	...	...	...	799
(11)	Number of live births	...	...	...	...	768
(12)	Number of stillbirths	...	...	...	...	49
(13)	Deaths of newly born (under 4 weeks)	...	...	...	...	49
(14)	Number of maternal deaths	...	...	...	...	2
(15)	Number of surgical operations	...	...	...	...	2244
(16)	Number of X-ray investigations	...	...	...	...	7588
(17)	Number of patients treated in Dental Department	...	...	...	...	56

Nurses' Training School. The following results were obtained in the Nurses' Training School during the year :—

(A) STATE REGISTRATION EXAMINATIONS.

	<i>Entered.</i>	<i>Passed.</i>	<i>Re-entries.</i>
Preliminary Examination—			
Part 1	52	50	2
Part 2	19	19	—
State Final Examination	29	29	4

(B) CERTIFICATE OF THE CENTRAL MIDWIVES BOARD. PART I.

<i>Entered.</i>	<i>Passed.</i>	<i>Re-entries.</i>
55	40	9

Patients remaining in hospital—1st Jan., 1947 ...	323
Patients admitted	5087
Births	768
	<hr/>
	6178
Patients discharged	5338
Patients died	509
	<hr/>
Patients treated to a conclusion	5847
Patients remaining in hospital—31st Dec., 1947 ...	331

ADMISSIONS—AGE AND SEX DISTRIBUTION.

	<i>Male.</i>	<i>Female.</i>	<i>Total</i>
Births	402	366	768
Under 1 year	131	87	218
1-3 years	88	39	127
3-5 years	66	50	116
5-11 years	280	236	516
11-16 years	145	123	268
Adults	1247	2595	3842
	<hr/>	<hr/>	<hr/>
	2359	3496	5855

Thus of 4,288 patients admitted for treatment during the year (excluding maternity cases and births), 1,245 were under the age of 16 years (29%) and 977 were under the age of 11 years (22.7%).

ANALYSIS OF DEATHS IN AGE GROUPS.

Total number of deaths=509.

<i>Ages.</i>				<i>Male.</i>	<i>Female.</i>	<i>Total.</i>
Under 1 year	...	...		53	31	84
1 to 5	„	...	...	6	2	8
5 to 10	„	...	...	—	4	4
10 to 15	„	...	...	2	3	5
15 to 25	„	...	...	6	3	9
25 to 35	„	...	...	6	6	12
35 to 45	„	...	...	9	11	20
45 to 55	„	...	...	22	16	38
55 to 65	„	...	...	42	30	72
65 to 75	„	...	...	68	43	111
Over 75	„	...	...	69	77	146
				283	226	509

Deaths within 24 hours of admission=85

Causes :—

Neonatal 12

Terminal—

Acute disease 37

Chronic Disease 36

Death Rate The corrected death rate after exclusion of senile cases, inoperable cancer and cases dying within 24 hours of admission is 2.4%.

OPERATIONS IN THE MAIN THEATRE.

Abdominal: Major	...	...	...	376
Gynæcological:				
Major	...	...	...	199
Minor	...	...	...	264
Cæsarean Operations	...	...	...	99
Genito-Urinary:				
Major	...	...	...	84
Minor	...	...	...	145
Ear, Nose and Throat	...	...	...	487
Minor operations not included above			...	568
Others:—Thoracic	...	...	...	10
Amputations	...	...	...	12

There were 416 emergency operations during the year=23%
excluding E.N.T. cases.

MATERNITY DEPARTMENT.

Number of available beds	...	...	36
Number of patients admitted	...	...	963
			(including 29 babies)
Number of patients delivered by:			
(a) Midwives	...	...	603
(b) Doctors	...	...	196
Number of patients discharged undelivered			79

Mothers:

799 mothers gave birth to 817 children. There were
18 cases of twin birth.

How Admitted:

Through Ante-Natal Clinic	...	...	733
Emergency	...	...	201

Parous State:

Primipara	...	...	374
Multipara	...	...	425

Presentations :

Vertex	733
Breech—Complicated	43
„ Uncomplicated	39
Face	1
Brow	1
B.B.A.	7

Obstetrical Operations :

Instrumental deliveries	67
Surgical induction of labour	34
Cæsarean operations	99
Internal Version	8

<i>Maternal deaths</i>	2
-------------------------------	---

<i>Whether Admitted through A.N. Clinic.</i>	<i>Mode of Delivery.</i>	<i>Cause of Death.</i>	<i>Number of Cases.</i>
No.	Caesarean	Myocardial degeneration ; spontaneous pneumothorax, fatty degeneration of liver. (Stillbirth delivery) ...	1
No.	Breech	Obstetric shock ; delayed labour ; breech presentation. (Stillbirth delivery)	1

Puerperal Pyrexia.—13 cases delivered in the hospital were pyrexial (Ministry of Health standard).

Infants.

Births :—

(a) Premature	181
(b) Mature	636

Survivals :—

(a) Born and survived	719
(b) Born and died :—	
(i) within 4 weeks	49
(ii) within 10 days	35

Stillbirths	49
--------------------	----

Thus of 817 infants born, 49 died and 49 were stillborn=11.9%
Of 768 infants born alive, 49 died = 6.3%

Causes of neonatal deaths, i.e. within ten days :—

Broncho-pneumonia	...	...	...	...	2
Gastro-enteritis	...	...	...	...	2
Immaturity and gastro-enteritis	...	...	...	...	1
Prematurity	...	...	...	...	16
Rhesus incompatibility	...	...	...	...	2
Prematurity and gastro-enteritis	...	...	...	...	4
Malformations	...	...	...	...	2
Obstetrical trauma	...	...	...	...	1
Pulmonary atelectasis	...	...	...	...	5

(A) ANTE-NATAL DEPARTMENT.

Number of sessions	...	...	...	...	153
Number of attendances	...	...	...	...	6095
Number of attendances per session	...	...	...	...	39.8
Number of expectant mothers seen	...	...	...	...	1350
Average number of attendances made by each	...	...	...	...	4.5
Number referred for X-ray examination...	...	...	...	...	178
Number referred to Consultant Ante-Natal Clinic	...	...	...	...	57

Consultant Obstetrical Clinic :

New Cases	...	...	...	...	128
Total attendances	...	...	...	...	208

(B) POST-NATAL DEPARTMENT.

Number of Sessions	...	...	...	...	50
Number of new cases	...	...	...	...	645
Number of new cases—M. and C.W.	...	...	...	...
District cases	...	...	...	...	226
Total number of attendances	...	...	...	...	1027

RADIOLOGICAL DEPARTMENT.

Total Radiographic Examinations ...	3771
Chest Radiographs	1539
Lipiodol Examinations	23
Opaque Meal Examinations ...	203
Opaque enemata	12
Cholecystograms	50
Intravenous pyelograms	132
Retrograde pyelograms	20

DENTAL DEPARTMENT.

Patients examined	56
Number of attendances	71
Scalings	2
Extractions	76
Fillings	18
Dentures	3
Appliances	3
Other operations	25

OUT-PATIENT AND CASUALTY DEPARTMENT.

New patients—medical ...	614
surgical ...	2129
Casualties	1425
Total attendances	4477

PHYSIOTHERAPY DEPARTMENT.

New patients treated ...	587
Number of treatments ...	3591

CLASSIFICATION OF IN-PATIENTS WHO WERE TREATED
TO A CONCLUSION IN THE CITY HOSPITAL DURING
THE YEAR ENDED 31ST DECEMBER, 1947.

(EXCLUDING PATIENTS TREATED UNDER THE EMERGENCY MEDICAL
SERVICES SCHEME, OF WHOM THERE WERE 42.)

<i>Disease Groups.</i>	<i>Children</i>		<i>Adults</i>	
	<i>Dis- charged.</i>	<i>Died.</i>	<i>Dis- charged.</i>	<i>Died.</i>
Acute Infectious Disease ...	11	—	—	—
Influenza	2	—	2	—
Tuberculosis—				
Pulmonary	6	5	22	14
Non-pulmonary	4	4	18	3
Malignant disease ...	—	—	66	68
Rheumatism—				
Acute rheumatism (rheu- matic fever) together with sub - acute rheumatism and chorea	15	2	7	—
Non-articular manifesta- tions of so-called “ rheu- matism ” (muscular rheu- matism, fibrositis, lum- bago and sciatica) ...	—	—	17	—
Chronic arthritis ...	—	—	8	—
Venereal disease	6	1	450	—
Puerperal Pyrexia				
Patients confined in hospital	—	—	13	—
Patients confined at home	—	—	11	—
Other diseases and accidents connected with pregnancy and childbirth	10	42	402	2
Mental diseases—				
(a) Senile Dementia ...	—	—	2	—
(b) Others	2	—	10	1
Senile decay	—	—	6	5
Accidental injury and vio- lence	98	1	244	14
In respect of cases not in- cluded above :—				
Disease of the Nervous Sys- tem and Sense Organs ...	44	4	77	45
Disease of the Respiratory System	139	19	110	36
Disease of the Circulatory System	9	2	141	162
Disease of the Digestive Sys- tem	253	19	440	38
Disease of the Genito-urinary System	36	—	495	22
Disease of the Skin ...	85	—	66	—
Diseases not classified ...	11	—	15	—
Tonsil and Adenoid patients	403	—	5	—
Nursery Children	33	—	—	—
Patients discharged from Maternity Ward				
Mothers	—	—	804	—
Infants	740	—	—	—
TOTALS ...	1907	99	3431	410

ANNUAL PATIENT STATISTICS.

	<i>Year ending</i> 31/12/45	<i>Year ending</i> 31/12/46	<i>Year ending</i> 31/12/47
Admissions	4047	5223	5087
Births	626	784	768
	—	—	—
TOTALS ...	4673	6007	5855
Discharges	4056	5452	5338
Deaths	572	526	509
	—	—	—
TOTALS ...	4628	5978	5847
In-Patient days ...	104,731	120,594	119,698
Daily average Beds occupied	282.14	330.39	327.94
Highest Number ...	323	368	395
Lowest Number ...	235	302	250
Average duration of stay	22.41 days	20.68 days	20.44 days

COMMENTS.

The work of the hospital has continued at a very high intensity during the year. Having regard to the difficulties of staffing the wards adequately with nurses, the number of patients treated is a matter for some astonishment. With some 175 (30%) beds fewer than in the peak period of activity before the War there is an increase of no less than 16% in the number of patients treated and 50% in the number of operations performed. This achievement has been obtained in the face of disabilities which will need to be swept away if the hospital is to expand further to serve the greater needs which it will have to meet under the National Health Service. Throughout these comments attention will be paid to some of the difficulties which need to be overcome.

Chronic Sick.

In this branch of work there has not been possible the improvement that was desired. Progress, slow because of shortages of materials, has nevertheless been made in the re-conditioning of Wards 14 and 15. The need for a lift to

serve the upper floors has been very evident ; its installation is imperative, and it is anticipated that it will be installed during the next twelve months.

The renovations which have been made are worth-while in the present state of limitation of building, but the long-term view should be the provision of more and better accommodation for the chronic sick and the infirm aged patients. The present accommodation is insufficient for the needs of the City within its existent borders. The fact must be faced, however, that even if Wards 14 and 15 were fully renovated there is no immediate prospect of securing a nursing staff adequate for the additional 60 beds which would thus be provided.

Part-time nurses are being used with success on these wards, but a further 60 patients would require at least 35 nurses—or some 70 part-time nurses—and there is no immediate prospect of such a number being available.

This problem of accommodating the chronic sick is not a new one. Despite the consideration it has received, however, a satisfactory solution is no nearer.

Maternity Department : This department has worked at full strength. Notwithstanding the fact that it had unfortunately to be closed in June, 1947, owing to an outbreak of neonatal diarrhoea, the number of mothers confined, 799, is only 15 less than in the previous year. This is a high figure, and it is only attainable by reducing the length of stay after confinement below the ideal level of fourteen days.

The ante-natal clinic accommodation requires urgent improvement. The present accommodation is recognised as unsatisfactory in size, convenience, and facilities ; it was hoped that it would be temporary accommodation only. The needs for improvement are fully recognised, but it has not proved possible to have these made. The Clinic serves not only the patients confined in the City Hospital, but also those confined at Flete, and the task of dealing with such large numbers of expectant mothers has been a very difficult one. An attempt has been made, with some success, to lessen the congestion in this department and to improve the facilities by means of a system of appointments.

**Children's
Wards.**

Over two years ago plans were approved for the reconstruction of Wards 5 and 7, damaged in part in 1941 by enemy action. They are to be developed as much needed accommodation of a modern type for infants and young children. In my report for last year I mentioned that the work was expected to be completed in 1947. So slow, however, has progress been that it is with regret that I have to report that at this date (March, 1948) a start has not yet been made.

**Operating
Theatre.**

The hospital has only one operating theatre. The number of operations performed, 2,244, is a very large number to be carried out under these conditions, and further developments will need to take full cognizance of this. A theatre for minor and out-patient operations is necessary, and a new theatre block of at least two theatres is urgently required.

**Out-Patient
Department.**

During the past three years there has been a steady development in the out-patient work of the hospital, and the accommodation—originally designed as a small ante-natal out-patient department—is inadequate. Undoubtedly a much better out-patient department—even as a temporary measure—will be required.

**X-Ray
Department.**

The services of an additional Radiographer have been made available, the X-ray work of the hospital having increased considerably with the general increase of acute work. The department—damaged in part by enemy action—is woefully inadequate; it is small and cramped, with improvised dressing and undressing arrangements only for patients. A re-conditioned diagnostic X-ray set is awaiting installation, but our efforts at securing a new temporary department in which to put it have not been successful. Plans now exist for such a Department, and there are prospects that this high priority need will be met shortly.

Rehabilitation. There have been no new developments in this Department. The responsibilities of physiotherapists in the welfare of patients have increased during the last few years. The scope of the work in a modern physiotherapy department embraces much more than “massage therapy” of the past. Physiotherapists now play a full part in the treatment of

chest diseases ; in the preparation for operation, and in the post-operative period, by exercises whilst the patient is still in bed, and subsequently in the complete rehabilitation of the patient until his return to work. The City Hospital will need to have considerable improvements effected, both in the number of physiotherapists employed and in the facilities provided for the complete cure of the patient. The present accommodation is temporary and adequate development will need further building.

Langdon Court Convalescent Home. This home was opened in June, 1947. It has not yet been used as fully as it might be for the convalescent treatment of Plymouth children. Temporarily part of the accommodation is in use for adults. It is an extremely valuable adjunct to the medical facilities of the City and will no doubt find increased use in the future.

Medical Staff. Dr. Hunter, Paediatrician to the hospital, has left the staff on leaving the district. A successor to his post of Paediatrician has not yet been appointed.

Dr. Steed has joined the staff as a whole-time Physician. Dr. Capon has been appointed Anaesthetist. The services of a Neurologist (Dr. Alcock) and a Dermatologist (Dr. Whitlock) have been made available on a part-time basis.

Nursing Staff. Throughout the year there has been a shortage both of trained staff and of student nurses. It is impossible to maintain the work in the wards without an adequate nursing staff, and unless the staff can be maintained, the only possible measure will be to reduce the number of beds in use ; the standard of nursing care of the patients cannot be allowed to drop.

Hospitals have always relied on Student Nurses for a large part of their nursing staff, and the senior student takes a very important part in the work of the hospital. Just as N.C.O.s are the backbone of an Army, so are the senior students of a well-balanced Nursing Team, and the City Hospital is suffering from the want of an adequate number of such seniors. This should only be a temporary inconvenience. When the Comprehensive Scheme of training of student nurses gets fully into its stride it is promised that the number of junior nurses will be balanced by an adequate number of seniors.

Librarians. A re-organised Library—a branch of the Public Libraries of the City—has been established at the City Hospital for the benefit of patients, and the improvements in the quality of the books supplied from this source, over those which were previously available when the hospital had its own library, is very noticeable.

The willing and generous service of our voluntary helpers has assisted in no small way in making the facilities available to the whole of the patients, and I should like to thank them for their invaluable help.

This report covers the last full year of working of the hospital as the Plymouth City Hospital prior to its transfer to the South-West Region Hospital Board. It may be of interest to comment on the growth of the Hospital since it was taken over by the City from the Poor Law Authority. From 1931 it was developed as a General Hospital, and the statistics which are included in this, and previous reports, show the part that it has been taking in the medical work of the City. The number of operations is a good index of this work. In 1947 there were 2,244 operations, which is twenty-eight times the number in 1929. The following comparative statistics show that the development of the hospital has been very largely in its acute work.

					1932	1947
Admissions	...	...	...	...	3172	5855
Confinements	...	...	...	...	277	799
Births	...	...	...	...	262	768
Deaths	...	...	...	...	539	509
Duration of stay—						
Under 4 weeks	...	...	...	...	2314	5193
Over 4 weeks and under 13 weeks					616	556
13 weeks and more			...	...	213	110
Discharges	...	...	...	...	2604	5338
Beds available	...	...	...	...	570	395
Operations	...	...	...	...	1075	2244
Ante-natal attendances			...	...	1030	6095

In these comments some attention has been focussed on unsatisfactory accommodation. It should be remembered, however, that as concerns accommodation, the last War was a double blow to the Hospital. Enemy action reduced considerably the number of beds available, and the plans which were approved before the War for replacing the unsuitable accommodation with a larger and well-equipped modern hospital were unfortunately unable to be implemented. Structural alterations, which would otherwise have been made, were held up because of the imminence of the re-building scheme. Only the Maternity Ward was able to be completed and that ward, an example of what the rest of the hospital would have been, makes the inability to undertake rebuilding a matter of real regret.

I should like to express my thanks to my medical and nursing colleagues for their loyal co-operation in the work of the hospital.

Port Health Department

REPORT OF THE SENIOR ASSISTANT PORT MEDICAL OFFICER

DR. W. N. M. MASON.

I. AMOUNT OF SHIPPING ENTERING THE PORT DURING THE YEAR.

During 1947, 1,342 vessels entered the Port, with a total net tonnage of 1,012,328, as against 1,226 vessels with a total net tonnage of 1,035,809 in 1946.

In the year under review, 77 ships were boarded by the Medical Officers, and 1,067 by the Inspector.

TABLE A.

AMOUNT OF SHIPPING ENTERING THE PORT DURING THE YEAR 1947.

	No.	Tonnage.	No. Inspected.		No. reported to be defective.	No. of vessels on which defects were remedied.	No. of vessels on which defects were found and reported to Ministry of Transport Surveyors.	No. of vessels reported as having or having had during the voyage infectious diseases on board.
			By the M.O.	By the Port Health Inspector.				
Foreign Steamers	190	575,489	75	211	16	11	—	7
Motor	156							
Sailing	—							
Fishing	—							
Total Foreign	346	575,489	75	211	16	11	—	7
Coast-wise Steamers	558	436,839	2	856	30	22	—	—
Motor	438							
Sailing	—							
Fishing	—							
Total Coast-wise	996	436,839	2	856	30	22	—	—
Total Foreign and Coast-wise	1342	1,012,328	77	1067	46	33	—	7

II. CHARACTER OF THE TRADE OF THE PORT.

(a) *Passenger Traffic.* During 1947, 4,646 persons passed through the Port, as against 3,976 for the previous year.

The number of Aliens passing through the Port was 1,558 compared with 1,006 in the previous year.

The number of passengers embarked during the year was 425, and the number of passengers landing was 4,646.

(b) *Cargo Traffic. Coastwise.* General cargoes of foodstuffs arrive regularly from London, Bristol, Liverpool and Glasgow, and coal from the North-East and Bristol Channel Ports.

Foreign. Cargo traffic consisted mainly of timber from Canada, Sweden and Germany; fertilizers from Holland and Germany; phosphates from Holland, Germany and North Africa.

TABLE B.

(a) PASSENGER TRAFFIC DURING THE YEAR 1947.

	<i>No. of Passengers.</i>
Inwards	4,646
Outwards	425

(b) CARGO TRAFFIC.

The principal imports were :—

Foreign.

Timber from Gothenburg, Lovholmen, Hamburg and Vancouver.

Fruit from the West Indies, Holland and France.

Fertilizers from Ghent, Antwerp and Hamburg.

Fuel Oil from Abadan and Trinidad.

Coal from Houston and Pensacola.

Iron Ore from Wabana (Nova Scotia) and Antwerp.

Root Crops from Rotterdam and Amsterdam.

Salt from Torrevieja and Setubal.

Wheat from Vancouver and Montreal.

Pyrites from Huelva.

Coastwise.

Coal from South Wales and North-East Ports.

Vaporising Oil from Hamble, Southampton, Brixham and Thameshaven.

Fertilizers from London, Middlesborough, Boston and Tyne.

Cement from London and Silloth.

Phosphates from Middlesborough, Hartlepool, Stockton and London.

Basic Slag from Boston, Grimsby and Middlesbrough.

China Clay from Par, Charlestown and Fowey.

Flour from Cardiff, Bristol and Penzance.

Potash from Newport, Manchester and Guernsey.

Benzine from Southampton, Hamble, Sheerness and Swansea.

Coke from Glasgow and Newcastle.

Maize and Grain from Avonmouth and Liverpool.

Potatoes from Londonderry, Belfast, Kilkeel and Milroy.

Fish from Deep Sea Fishing Grounds.

Sugar from London and Liverpool.

Flour from Liverpool and Bristol.

Margarine, Jam, Peas, Onions, Oats, Lentils, Syrup, Rice, Biscuits, Cooking Fat and Tinned Fish from Liverpool.

Tea, Jam, Sauce, Tinned Fruit, Mustard and Barley from London.

Coffee, Custard Powder, Apples, Soap, Macaroni, Tinned Soups, Meat and Vegetables and Tinned Milk from Glasgow.

(c) FOREIGN PORTS FROM WHICH VESSELS ARRIVE.

<i>Asia and Australasia.</i>	<i>Europe.</i>	<i>America.</i>	<i>Africa.</i>
Calcutta.	Emden.	New York.	Beira.
Curacao.	Bremerhaven.	Philadelphia.	Sousse.
Haifa.	Hamburg.	Boston	Oran
Melbourne	Lubeck	Houston	Dakar
Sydney	Weismar.	Pensacola.	Lagos.
Istanbul.	Bremen.	River Plate.	Sfax.
Singapore.	Gothenburg.	Valparaiso.	Douala.
Setubal.	Kotka.	Trinidad.	Port Said.
Azores.	Bergen.	Porto Delgada	Alexandria.
Karachi.	Otterbacken.	Puerto Cabello.	Suez.
Port Pirie.	Jacobstad.	Torre Vieja.	

Asia & Australasia. Europe,

America.

Africa.

Batavia.

Abadan.

Shanghai.

Huelva.

Rundvik.

Hamina.

Stallarholmen.

Amsterdam.

Rotterdam.

Antwerp.

Fiume.

Cartagena.

Boulogne.

Ghent.

Lisbon.

Paimpol.

St. Malo.

Porto Vechio.

Barcelona.

Buenos Aires.

St. Johns, N.B.

Campbeltown, N.B.

Vancouver.

Montreal.

MEDICAL INSPECTION OF ALIENS.

ANNUAL RETURN BY THE MEDICAL INSPECTOR OF ALIENS FOR THE YEAR ENDED 31ST DECEMBER, 1947.

	TOTAL.	Number inspected by the Medical Inspector.	Number subjected to detailed examination by the Medical Inspector.	Certificates Issued					Trans-migrants.
				Lunatic idiot or M.D.	Undesirable for Medical reasons.	Physically incapacitated.	Suffering from acute infectious disease.	Landing necessary for adequate medical examination.	
(a) Total number of Aliens landing at the Port ...	1558	1558	174	—	—	—	—	—	—
(b) Aliens refused permission to land by Immigration Officer ...	6	6	—	—	—	—	—	—	—
(c) Transmigrants ...	—	—	—	—	—	—	—	—	—
Total Aliens arriving at the Port ...	1564	1564	174	—	—	—	—	—	—

Total number of vessels landing Alien passengers : 57.

Total number of vessels carrying Alien passengers : 59.

Number of vessels dealt with by the Medical Inspector : 57.

III. WATER SUPPLY.

(1) *Source of Supply.*

(a) *For the Port* (Great Western Docks, Cattedown and Sutton Harbour). Plymouth Corporation Water Department from hydrants on the wharves.

(b) *For Shipping.* The City's supply mains extend to the Port, and there are hydrants on the wharves for the use of shipping.

(2) *Water Boats.* The only water boat supplying fresh water to shipping in the Port is the *Ena*. The tanks were found to be in a clean and wholesome condition.

IV. PORT HEALTH REGULATIONS, 1933 and 1945.

(1) *Arrangements for dealing with Declarations of Health.*

Declarations of Health are inspected and collected by the Boarding Medical Officers in the case of passenger liners and vessels from infected ports. In the case of other vessels, the Declarations of Health are inspected and collected by the Port Health Officer or by Officers of H.M. Customs, who forward the forms immediately to the Port Health Authority Office.

(2) *Boarding of Vessels on Arrival.*

All mailboats and passenger vessels from foreign ports are boarded by the Port Medical Officer on arrival. The Medical Officer normally goes off in the G.W.R. tender with the Customs Officers and other Port Officials. On boarding the vessel, the Medical Officer investigates any case of reported sickness before the other shore officials go on board, and takes appropriate action. If no case of infectious disease is reported, and the Boarding Medical Officer is satisfied that all is well, the other shore officials board from the tender.

All vessels reporting illness of an infectious nature are boarded in the Sound by the Medical Officer and the Inspector, who go off in the Port Health launch ready to land any cases if necessary. Vessels also request the services of the Port Medical Officer for cases of illness other than infectious disease, and services are readily given.

Vessels from infected ports are either boarded in the Sound by the Port Medical Officer from the Port Health launch, or on berthing.

Cargo vessels entering the Port are boarded by an officer of Customs or by the Port Health Inspector. •

(3) *Notification to the Authority of Inward Vessels requiring special attention.*

(a) *Wireless Messages.* Vessels landing passengers, and any vessels requiring the attention of the Port Medical Officer, usually wireless their time of arrival at the Port and the state of health on board to the Agents. The latter then inform the Port Health Authority, and in the case of vessels landing passengers, give the time that the tender will be leaving the wharf.

(b) *Pilots.* The Chief Pilot is sent weekly a list of the infected ports. Usually the tender leaves the wharf with the Medical Officer before the Pilot has boarded the vessel outside the Breakwater.

(c) *Customs Officers.* A list of infected ports is supplied weekly to the Customs Officers, who do not issue pratique until vessels arriving from such ports are boarded by the Port Medical Officer. Shipping arrivals are notified daily to the Department by the Customs.

(4) *Mooring Stations designated under Article 10.*

(a) Within the Docks.

(b) Outside the Docks.

Jennycliffe Bay is used as a mooring station in the case of vessels which intend entering the Docks. As the larger liners "lie off" in Cawsand Bay, or just inside the Breakwater, the usual anchorage is regarded as a mooring station.

(5) *Particulars of any standing exemptions from the provisions of Article 14.*

A standing exemption from detention has been granted in respect of vessels with infectious disease on board other than Cholera, Plague, Yellow Fever, Typhus and Smallpox, and for vessels otherwise clean arriving from ports in areas listed under Article II.

(6) *Experience of working Article 16.*

No difficulty has been experienced in the working of Article 16..

(7) (a) *Premises and Waiting Rooms for Medical Examination.*

No special waiting rooms or premises are provided for medical examination at the Plymouth Docks, but can, if necessary, be carried out at the Port Health Department's offices in the Docks.

(b) *Cleansing and disinfection of ships, persons, clothing and other articles.*

When cases of infectious disease are removed from ships in the motor launch *Golden Hind* to hospital ashore, the quarters on board are disinfected with Formalin. Clothing, bedding, etc., are conveyed to the City Isolation Hospital, Swilly, for disinfection. Facilities are provided at the Exmouth Road Cleansing Station for the cleansing of persons.

(c) *Premises for the temporary accommodation of persons for whom such accommodation is required for the purposes of the regulations.*

Cases of acute infectious disease requiring isolation are accommodated at the City Isolation Hospital.

(d) *Hospital accommodation available for Plague, Cholera, Yellow Fever, Smallpox and other infectious diseases.*

Beds can be made available at the City Smallpox Hospital, Lee Mill, near Plymouth.

(e) *Ambulance Transport.*

Cases of infectious disease are brought ashore in the Authority's launch *Golden Hind*, and conveyed to the City Isolation Hospital in the Health Department Ambulance. Other cases are removed by the St. John Ambulance Brigade.

(f) *Supervision of Contacts.*

If a case of infectious disease is landed from a vessel, all persons on board are regarded as contacts, and are kept under surveillance throughout the incubation period during their stay in port. When there are persons landing, their names and addresses are taken and forwarded to the Medical Officer of Health of the district to which they are proceeding, so that they may be kept under observation until the quarantine period has elapsed. Reply cards are issued to the contacts so that they may notify any change of address to the Department's office.

In the case of Smallpox, unless in the opinion of the Medical Officer the contact is recently protected by vaccination or by a previous attack of Smallpox, the following procedures are available :—

- (a) the person be offered vaccination and placed under surveillance for a period not exceeding fourteen days after the date of arrival of the ship, or
- (b) be placed under surveillance for the said period without vaccination, or
- (c) be offered vaccination and isolated until the result of the vaccination is known, and thereafter kept under surveillance until the fourteenth day after the date of arrival of the ship, or
- (d) be isolated for a period of fourteen days after the date of arrival of the ship.

8. *Arrangements for the bacteriological examination of Rats for Plague.*

These examinations are carried out by the City Pathologist at the Prince of Wales's Hospital, Greenbank, Plymouth.

9. *Arrangements for other bacteriological or pathological examinations.*

The City Pathologist carries out all other bacteriological or pathological examinations required such as water samples, sewage effluents, shellfish samples, throat swabs and other clinical material.

10. *Arrangements for the diagnosis and treatment of Venereal Disease among Sailors under International arrangement.*

All ships coming into the Docks are boarded by the Port Medical Officer or Inspector, and where necessary, any information is supplied concerning venereal diseases. Pamphlets are provided to seamen setting out the times and days of the Venereal Disease Clinics at the City Hospital, together with directions showing the route from the Docks to the Clinic.

11. *Arrangements for the interment of dead.*

Agents make their own arrangements for the interment of the dead.

Where deaths have occurred from any of the five major diseases, cremation is advised.

12. *Other matters, if any, requiring or receiving attention.*

A Clinic for the treatment of Scabies and the cleansing of verminous persons is available for seamen daily between the hours of 9 a.m. and 12 noon, excepting Sundays.

Parrots (Prohibition of Import) Regulations, 1930.

One Order was issued during 1947, and was served on a member of the crew of the S.S. *Llangollen*.

TABLE C.
CASES OF INFECTIOUS SICKNESS LANDED FROM VESSELS.

<i>Disease.</i>	<i>No. of cases during the year.</i>		<i>No. of vessels concerned.</i>	<i>Average No. of cases for previous 5 years.</i>
	<i>Passengers.</i>	<i>Crew.</i>		
Typhoid ...	—	1	1	0.4
Chicken Pox ...	2	—	1	—

TABLE D.
CASES OF INFECTIOUS SICKNESS OCCURRING ON VESSELS DURING THE VOYAGE BUT DISPOSED OF PRIOR TO ARRIVAL.

<i>Disease.</i>	<i>No. of cases during the year.</i>		<i>No. of vessels concerned.</i>	<i>Average No. of cases for previous 5 years.</i>
	<i>Passengers.</i>	<i>Crew.</i>		
Malaria ...	1	2	2	1.8
Chicken Pox ...	—	1	1	0.2
Mumps ...	—	2	1	0.4
Measles ...	—	1	1	0.2

Infectious Diseases. No major infectious disease occurred in any ship arriving in Plymouth during the year.

Cases landed at the Port.

On 31st August, the Chief Steward of the Norwegian vessel *Martin Bakke* was removed to the City Isolation Hospital suffering from Typhoid Fever.

On 23rd September, two British child passengers aboard the American ship *Marine Tiger* were removed to the City Isolation Hospital suffering from Chicken Pox.

Cases of non-infectious disease were dealt with as follows :—

One Swedish officer of the S.S. *Colombia* was removed to the Prince of Wales's Hospital, Plymouth, suffering from broncho-pneumonia.

One of the crew of the S.S. *Empire Chamois* was removed to Mount Gold Hospital suffering from Spondylitis.

One of the crew of the S.S. *Reborn* was removed to the City Isolation Hospital suffering from Impetigo.

The "Bosun" of the S.S. *Llangollen* was removed to the City Hospital suffering from Carbon Monoxide poisoning.

One British passenger aboard the Motor Vessel *Amstelkerk* was landed suffering from a compound fracture of the leg.

During the year 67 British seamen and 47 Foreign seamen were treated at the Venereal Disease Clinic. These figures compare unfavourably with the 21 British and 40 Foreign reported in last year's Annual Report.

The nationalities were as follows :—

British	...	...	67	Canadian	...	...	5
American	...	...	10	Danish	...	...	2
Greek	...	...	2	Swedish	...	...	5
Indian	...	...	2	Estonian	...	...	3
Norwegian	...	...	1	Latvian	...	...	3
Dutch	...	...	8	Polish	...	...	2
French	...	...	2	Maltese	...	...	2

Total : 114.

Two seamen were treated for Scabies.

V. MEASURES AGAINST RODENTS.

(1) *Steps taken for the detection of Rodent Plague.*

(a) *In Ships in the Port.* All vessels from infected ports are subjected to close enquiries by the Port Health Inspector. Stevedores are asked to report the presence of any dead rats discovered while cargoes are being unloaded. A proportion of dead rats recovered are sent to the City Pathologist for detailed microscopical examination.

(b) *On Quays, Warehouses, Wharves in the Vicinity of the Port.* Daily visits were made to wharves and warehouses during the year for the purpose of ascertaining the extent of rat infestation. A percentage of rats caught were sent to the City Pathologist for examination for Plague.

(2) *Measures taken to prevent passage of rats between ship and shore.*

All vessels found to be rat infested are required to have rat guards fixed on all mooring ropes from ship to shore. Plague infected or suspected vessels may be required to undergo a preliminary fumigation to destroy rats before commencing to discharge cargo. After discharge, a complete and thorough fumigation is carried out. During discharge the following precautions are enforced :—

(a) Vessels to be moored not less than six feet from the quay.

(b) Efficient rat guards to be fixed to all mooring ropes or hawsers and ropes wrapped with canvas and freshly tarred every night.

(c) One gangway only to be used, which must be well lighted at night.

(d) Gangways used for the discharge of cargo to be removed when the vessel is not working.

(3) *Methods of Deratisation.*

(a) *On Ships.* Deratisation of ships is carried out by fumigation with either sulphur dioxide or hydrocyanic acid gas. These fumigations are carried out by private firms under the supervision of the Port Health Authority. Twenty-four hours' notice at least must be given to the Port Health Authority before fumigation is commenced. The notice must contain the cubic capacities of the different compartments and the fumigant being used.

(b) *Premises in the vicinity of docks or quays.* During the year, visits have been made to cliffs, beaches, sea walls, warehouses and premises coming within the jurisdiction of the Port Health Authority. In most cases where evidence of rat infestation has been found, pre-baiting has been carried out with considerable success. Other means employed have been the setting of traps and the laying down of poison baits. Post-baiting has proved that the rat population has been reduced to a minimum. The total number of poison baits laid was 525, and the number of rats destroyed was 1,090.

(4) *Measures taken for the detection of rat prevalence in ships and on shore.*

All ships arriving at the various wharves are boarded by the Port Health Inspector and enquiries made of the officers and crews as to evidence of rat infestation. Foremen stevedores are also questioned as to the presence of rats. Where rat infestation is found, trapping or poisoning is carried out by the rat-catcher. Periodical visits are made to warehouses and premises in order to ascertain whether rat infestation exists.

(5) *Rat-Proofing.*

(a) *To what extent are docks, wharves, warehouses, etc., rat-proof.* Due to enemy action most of the warehouses and sheds in the dock areas are not rat-proof. A number of warehouses which were badly damaged, and are a possible harbourage for rats, have been demolished, and all debris cleared from the sites. All grain coming into the Port is discharged into the silo at Millbay Docks. This silo is built of reinforced concrete, with raised concrete loading platforms, and so designed to prevent the ingress of rats.

(b) *Action taken to extend rat-proofing.*

(i) *Ships.* During routine inspection of vessels, the Port Health Inspector calls the attention of the responsible officials to any particular part in need of rat-proofing. When rat infestation is found the owner is advised to substitute metal sheathing and expanded metal in place of wooden casings and sheathings, and to rat-proof provision storerooms and other compartments where necessary.

(ii) *On Shore.* Little has been done to rat-proof warehouses and buildings, as in many areas rebuilding will be necessary. Rat-proofing of the old and damaged buildings is impracticable.

RATS DESTROYED DURING YEAR.

TABLE E.—(1) ON VESSELS.

<i>No. of Rats.</i>	<i>Jan.</i>	<i>Feb.</i>	<i>Mar</i>	<i>Ap.</i>	<i>May</i>	<i>June</i>	<i>July</i>	<i>Aug.</i>	<i>Sept.</i>	<i>Oct.</i>	<i>Nov.</i>	<i>Dec.</i>	<i>Total in year.</i>
Black ...	—	—	—	—	—	—	7	—	—	8	—	—	15
Brown ...	—	—	—	—	—	—	—	—	—	—	—	—	—
Species not recorded ...	—	—	—	—	—	—	—	—	—	—	—	—	—
Examined ...	—	—	—	—	—	—	—	—	—	—	—	—	—
Infected with Plague ...	—	—	—	—	—	—	—	—	—	—	—	—	—

TABLE F.

(2) IN DOCKS, QUAYS, WHARVES, WAREHOUSES.

<i>No. of Rats.</i>	<i>Jan.</i>	<i>Feb.</i>	<i>Mar</i>	<i>Ap.</i>	<i>May</i>	<i>June</i>	<i>July</i>	<i>Aug.</i>	<i>Sept.</i>	<i>Oct.</i>	<i>Nov.</i>	<i>Dec.</i>	<i>Total in year.</i>
Black ...	6	—	—	—	—	—	—	—	—	—	7	—	13
Brown ...	69	23	48	82	—	62	25	—	166	423	116	63	1077
Species not recorded ...	—	—	—	—	—	—	—	—	—	—	—	—	—
Examined ...	—	—	—	—	—	4	—	—	—	—	—	—	4
Infected with Plague ...	—	—	—	—	—	—	—	—	—	—	—	—	—

With regard to Table E, this is the lowest total of rats destroyed on board ship recorded for this Port, and it is hoped that the reduction of rat-infested ships will continue.

TABLE G.

MEASURES OF RAT DESTRUCTION ON PLAGUE "INFECTED" OR
"SUSPECTED" VESSELS OR VESSELS FROM PLAGUE INFECTED
PORTS ARRIVING IN THE PORT DURING THE YEAR.

<i>Total No. of such Vessels arriving.</i>	<i>No. of such Vessels Fumi- gated by SO₂.</i>	<i>No. of Rats killed.</i>	<i>No. of such Vessels Fumi- gated by HCN.</i>	<i>No. of Rats killed.</i>	<i>No. of such Vessels on which Trapping, Poisoning, etc., were employed.</i>	<i>No. of Rats killed.</i>	<i>No. of such Vessels on which Measures of Rat Destruc- tion were not carried out.</i>
1	2	3	4	5	6	7	8
9	—	—	—	—	—	—	9

TABLE H.

DERATISATION CERTIFICATES AND DERATISATION EXEMPTION
CERTIFICATES ISSUED DURING THE YEAR.

Net Tonnage.	No. of Ships	No. of Deratisation Certificates Issued.					No. of Deratisa- tion Exemp- tion Certifi- cates issued.	Total Certifi- cates Issued.
		After fumigation with			After Trap- ping Poison- ing, etc.	Total.		
		HCN.	Sul- phur.	HCN. and Sul- phur.				
1	2	3	4	5	6	7	8	9
Ships up to 300 tons	18	—	—	—	—	—	18	18
Ships from 301 to 1,000 tons ...	11	2	—	—	—	2	9	11
Ships from 1,001 to 3,000 tons ...	5	—	—	—	—	—	5	5
Ships from 3,001 to 10,000 tons ...	4	—	—	—	—	—	4	4
Ships over 10,000 tons ...	—	—	—	—	—	—	—	—
TOTALS ...	38	2	—	—	—	2	36	38

VI. HYGIENE OF CREWS' SPACES.

TABLE J
CLASSIFICATION OF NUISANCES.

<i>Nationality of vessel.</i>	<i>No. inspected during year.</i>	<i>Defects of original construction.</i>	<i>Structural defects through wear and tear.</i>	<i>Dirt, vermin and other conditions prejudicial to health.</i>
British	762	1	.25	53
Other Nations ...	305	10	3	9

Forty-six vessels were found to have defects during 1947. Four were fumigated for bug infestation, and four for cockroaches.

During the year careful attention has been paid to the inspection of crews' spaces by the Port Health Inspector. All ships entering the Port are visited as soon as possible after docking, and enquiries made concerning the health of the crew, the source of the water supply, cleanliness of tanks, water-closet accommodation, the condition of storerooms, and prevalence of rat infestation. Visits are made to the crews' quarters where special attention is given to cleanliness, structural defects, accumulation of rubbish, etc. Notices are served on masters of vessels to remedy defects and this is generally carried out by the shipping company concerned without any difficulty.

The majority of defects found were caused by the dirty condition of the crews' quarters in British ships, such as dirty cabins, messrooms, food lockers and wash-places.

The following two tables have been prepared giving details concerning the result of the inspection of 140 British ships and 126 Foreign ships. 130 British ships of under 2,000 tons net register were inspected and 19 were found to be without electric light. 125 Foreign ships of this tonnage were inspected and 8 were found to be without electric light. Of the British ships 41 were without wash-places, 37 without separate messrooms, 29 without ice-box or refrigerator.

TABLE I.

	Ships under 500 tons nett register.										Ships between 501 and 2,000 tons nett register.						Ships over 2,000 tons nett register.		
	Br.	Du.	Da.	Sw.	Pan.	Bel.	Nr.	Fv.	Ger.	Gk.	Br.	Du.	Sw.	Nr.	Pan.	Fin.	Gk.	Br.	U.S.A.
Number inspected	90	78	2	7	2	5	2	2	9	1	40	1	7	5	2	1	1	10	1
No. with crew's accommodation under forecastle	58	55	1	3	2	1	1	2	8	1	16	1	3	1	1	1	1	1	-
No. with crew's accommodation under amidships	2	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	1
No. with crew's accommodation aft	30	23	1	4	-	4	1	-	1	-	23	-	4	4	1	-	-	9	-
No. with messrooms separated from sleeping quarters	56	62	1	6	2	3	1	-	3	1	37	1	6	5	2	-	-	10	1
No. without separate messrooms	34	16	1	1	-	2	1	2	6	-	3	-	1	-	-	1	1	-	-
No. with clothes drying rooms ...	30	26	2	3	-	-	-	-	2	1	25	1	5	4	-	1	-	6	1
No. with separate sleeping accommodation for each watch or 2-berth cabins	34	37	2	4	-	2	-	-	-	1	28	1	7	4	2	-	-	7	1
No. without separate sleeping accommodation for each watch	56	41	-	3	2	3	2	2	9	-	12	-	-	1	-	1	1	3	-
No. with wash-places	55	55	-	7	2	4	1	-	4	1	34	1	7	4	2	1	-	9	1
No. without wash-places	35	23	2	-	-	1	1	2	5	-	6	-	-	1	-	-	1	1	-
No. without water in wash-places ...	1	-	-	-	-	-	-	-	-	1	1	-	-	1	2	1	1	-	-
No. lit by electric light	71	77	-	7	-	5	1	-	9	1	40	1	7	5	2	1	1	10	1
No. lit by oil lamps	19	1	2	-	2	-	1	2	-	-	6	-	-	1	-	-	-	1	-
No. heated by coal bogeys	45	37	2	2	2	-	1	2	8	1	34	1	7	4	2	1	-	9	1
No. with central heating	45	41	-	5	-	5	1	-	1	-	-	-	-	-	-	-	-	-	-
No. with icebox or refrigerator for food	22	9	-	6	-	5	1	-	4	-	33	1	6	5	2	1	-	10	1
No. without icebox or refrigerator for food	68	69	2	1	2	-	1	2	5	1	7	-	1	-	-	-	1	-	-
Average net registered tonnage ...	274	166	80	261	270	299	340	128	181	254	952	1713	810	997	1696	1468	533	4127	4370
Average number of crew	11	7	4	11	13	10	14	10	8	12	25	43	20	23	24	25	19	39	36

TABLE II

	<i>Ships under 500 tons nett register.</i>		<i>Ships between 500 and 2,000 tons nett register.</i>	
	<i>British.</i>	<i>Foreign.</i>	<i>British.</i>	<i>Foreign.</i>
No. of ships inspected	90	108	40	17
Without separate messrooms ...	38%	27%	7%	18%
Without separate sleeping accom- modation for each watch ...	62%	58%	30%	18%
Without wash-places	39%	32%	15%	12%
With coal bogeys for heating accom- modation	50%	50%	15%	12%
Without ice box or refrigerator for food storage	75%	80%	17%	12%

VII. FOOD INSPECTION.

(1) During the year 136 vessels were dealt with under the Public Health (Imported Food) Regulations, 1937; 19 were from Foreign ports and 117 coastwise. The total quantities of food-stuffs voluntarily surrendered and condemned as unsound, unwholesome and unfit for human consumption were as follows :—

	<i>Ton.</i>	<i>cwts.</i>	<i>qrs.</i>	<i>lbs.</i>
Tinned Fruit ...	1	5	0	12
Carrots	—	6	—	—
Strawberries	—	2	3	24
Beef	—	—	3	16
Tinned Fish	—	—	2	23
Jam	—	—	—	15
Dried Eggs	—	—	—	7
Total	1	15	3	13

No action was taken under the Public Health (Imported Milk) Regulations, 1926, and Public Health (Preservatives, etc., in Food) Regulations, 1925 to 1940.

No samples of food were taken during the year.

Two samples of drinking water were submitted to the City Bacteriologist for examination, the result in one case being no *Bacillus Coli* content, and in the other no *Bacillus Coli* in 100 c.c.

(2) *Shellfish*. Two samples of oysters, taken straight from the layings in the River Yealm, gave Coli counts of numerous B. Coli faecal type present.

The proprietor of the Oyster Fisheries has given an undertaking that no oysters are disposed of for sale without first undergoing a full cleansing process.

Liaison is established with the Medical Officer of Health of the District to which the oysters are consigned, and it is confirmed that all the oysters from this source undergo an efficient cleansing process before being offered for sale.

Cockles offered for sale within the City boundary, but gathered outside the area of the Port, were examined and gave unsatisfactory bacteriological results. The Medical Officer of the area from which they were gathered was notified, and he reports having taken suitable action.

School Health Service

REPORT OF THE SENIOR MEDICAL OFFICER.

• DR. T. H. HARRISON.

During the year 1947 no appreciable difficulties were encountered in the administration of the School Health Service and the work continued more smoothly than during any year since 1938.

Several decisions affecting the Service were made during the year by the Education Authority and probably the most important was a decision to establish a Child Guidance Clinic and to include in the Development Plan the provision of a boarding home in connection with the clinic. It was found impossible to commence the clinic during the year, however, as neither a Psychiatric Social Worker nor a Psychologist could be obtained, although a Psychiatrist with experience of Child Guidance Clinics was available.

The Authority also decided that the Public Health and School Health Dental Services should be combined from the date of the coming into operation of the National Health Service Act, 1946, and that treatment should be provided at all the School Dental Clinics and the Public Health Dental Clinic for school children, expectant and nursing mothers and children under school age. Another decision in connection with dental treatment was to appoint a Consultant Orthodontist to whom cases of special abnormalities of the teeth and jaws could be referred when required.

In the early part of the year an invitation was received from the Swiss Red Cross to send to Switzerland for a three months' holiday 25 school children selected from families who had suffered from the war and who for health reasons would benefit by a holiday in Switzerland. The invitation was gratefully accepted by the Authority who paid the expenses of the children to and from Switzerland and provided an escort of a teacher and a school nurse to and from Calais. All the other expenses of the children for the three months were borne by the Swiss Red Cross who provided escorts for the remainder of the journey.

There was an increase during the year in the number of pupils on the registers of the schools maintained by the authority, and

at the end of the year there were 24,355 pupils on the registers compared with 22,867 at the end of 1946. The main increase was at Primary Schools where the numbers increased from 14,150 at the end of 1946 to 15,028 at the end of 1947, whilst the numbers at Secondary Modern Schools increased from 5,410 to 5,971. The numbers at the Secondary Grammar and Technical Schools and the Day Special Schools remained about the same as in 1946.

Staff.

In January the Authority decided to appoint an additional assistant school medical officer from the 1st April, 1947, to make a total of $4\frac{1}{2}$ medical officers for the School Health Service. Dr. N. R. Matheson was appointed in January to fill a vacancy, and Dr. J. H. Wood in August to the additional post. Dr. M. S. Harvey resigned in December. The total time given by all medical officers to the Service during the year was equivalent to that of three and three-quarter whole-time medical officers compared with three and a half in 1946.

There were no changes in the dental staff of one senior and four assistant dental officers, and the five officers were engaged whole time throughout the year on the work of the school dental service, together with five dental attendants.

The nursing staff consisted of ten whole-time State Registered Nurses, including two with Health Visitor's qualifications. Two nursing assistants were also employed mainly in the clinics.

The remainder of the staff, viz. two whole-time Physiotherapists, one whole-time Speech Therapist, and the part-time Surgical Specialists at the Ophthalmic, Ear, Nose and Throat, and Orthopaedic Clinics continued unchanged.

**Routine
Medical
Inspection
at School.**

Every school maintained by the Authority was visited during the year for routine medical inspection, and all pupils in attendance who were due for inspection as Entrants, Primary Leavers and Secondary Leavers were medically examined. The pupils at the Notre Dame High School for Girls, a direct grant Grammar School, were also examined as agreed by the Authority last year.

All pupils found at routine medical inspections to require treatment or observation were re-examined.

The time table for the various groups of routine medical inspections was revised and additional visits were made towards the end of the year to examine a second batch of Primary and Secondary Leavers so that those requiring reinspection could be seen before they were transferred to a Secondary School or left school.

It was found impossible to arrange more than one visit to each school during the year for the examination of Entrants with the medical staff available, but this should be possible when a full staff is available for a full year.

The total number of pupils who received a routine medical inspection at school during the year was 8,196, compared with 6,991 in 1946 and 5,469 in 1945.

The 8,196 pupils inspected during 1947 comprised :—

Entrants to Primary Schools	...	...	...	2032
Leavers at Primary Schools	...	...	...	3541
Leavers at Secondary Schools	...	...	...	2377
Other periodic inspections	...	...	...	246

The 246 pupils who were inspected at other periodic inspections were those who received an annual inspection at the Day Special Schools for Educationally Subnormal Pupils and Deaf and Partially Deaf Pupils. Pupils attending the Open Air School were inspected at least once a term, and the numbers are included in the Special Inspections.

The number of reinspections carried out at schools during 1947 was 2,737, compared with 3,313 in 1946 and 416 in 1945.

RESULTS OF ROUTINE MEDICAL INSPECTION.

A total of 1,821 of the 8,196 pupils examined or 22.2% was found to require treatment, compared with 26.4% in 1946 and 37.1% in 1945. The numbers in the various groups were as follows :—

	<i>Number inspected.</i>	<i>Number found to require treatment.</i>	<i>Percentage found to require treatment.</i>
Entrants to Primary Schools	... 2032	475	23.4%
Leavers at Primary Schools ...	... 3541	782	22.1%
Leavers at Secondary Schools	... 2377	476	20.0%
Other periodic inspections ...	... 246	88	35.8%

The following table gives the numbers of the various defects found to require treatment per 1,000 pupils examined in the three age groups during 1947.

<i>Defect or Disease.</i>	<i>Number of defects requiring treatment per 1 000 pupils inspected during 1947.</i>		
	<i>Entrants to Primary Schools.</i>	<i>Leavers at Primary Schools.</i>	<i>Leavers at Secondary Schools.</i>
Skin	26.08	26.55	23.98
Eyes—(a) Vision	4.92	35.58	55.53
(b) Squint	20.18	10.17	4.63
(c) Other	18.21	28.81	20.19
Ears(a) Hearing	0.98	7.62	6.31
(b) Otitis Media	5.41	4.80	6.31
(c) Other	1.97	3.67	1.68
Nose or Throat	88.09	54.22	26.50
Speech	7.38	1.69	2.10
Cervical Glands	16.24	9.88	3.37
Heart and Circulation	4.43	5.93	12.20
Lungs	26.08	14.40	7.57
Developmental—(a) Hernia	1.97	1.69	0.84
(b) Other	1.48	0.85	1.68
Orthopaedic—(a) Posture	6.89	12.71	28.61
(b) Flat Foot	11.32	15.53	37.86
(c) Other	23.62	11.01	9.68
Nervous System—(a) Epilepsy	0.49	0.56	0.84
(b) Other	1.48	2.54	1.68
Psychological—(a) Development	0.98	2.82	0.00
(b) Stability	0.98	1.13	0.42
Other	18.70	15.25	8.83
TOTALS	287.88	267.41	256.81

The table shows that there was a gradual decrease in the total number of defects found to require treatment as the ages of the pupils examined increased and that the incidence of certain defects differed considerably at different ages.

The largest group of defects requiring treatment was that of defects of the nose and throat in Entrants, amounting to 88 per

1,000 pupils examined. In Leavers from Primary Schools these defects amounted to 54 per 1,000, and in Leavers from Secondary Schools only to 26 per 1,000.

The second largest group of defects requiring treatment was of defects of vision and other defects of the eyes in Leavers from Secondary Schools amounting to 80 per 1,000 pupils examined, compared with 74 per 1,000 Leavers from Primary Schools, and 43 per 1,000 Entrants.

The third largest group of defects requiring treatment was of orthopaedic defects, mainly posture and flat foot, in Leavers from Secondary Schools amounting to 76 per 1,000 pupils examined, compared with 39 per 1,000 in Leavers from Primary Schools and 42 per 1,000 in Entrants.

The fourth largest group of defects requiring treatment was of skin defects, amounting to 26 per 1,000 in Entrants and Leavers at Primary Schools and 24 per 1,000 in Leavers from Secondary Schools.

Treatment for all these defects was provided as in previous years at our own clinics.

**Ascertainment
of Handicapped
Pupils.**

There were no changes in the arrangements for the ascertainment of handicapped pupils, and 370 special examinations were carried out at the clinics during the year for this purpose.

In 165 of the cases the pupils were examined for a suspected disability of mind and the authority were advised as follows :—

- (a) Education in an ordinary school 12 pupils.
- (b) Education in an ordinary school with special educational treatment as :—
 - (1) An educationally subnormal pupil ... 30 pupils.
 - (2) A maladjusted pupil :—
 - (a) Without residential care 5 pupils.
 - (b) With residential care 3 pupils.
- (c) Education in a Special School for Educationally Subnormal Pupils :—
 - (1) Day 41 pupils.
 - (2) Boarding 7 pupils.

- (d) Education in a Special School for maladjusted pupils :—
- | | |
|---------------------|-----------|
| (1) Day | 0 pupils. |
| (2) Boarding | 2 pupils. |
- (e) Education in a Special School for other categories of handicapped pupils :—
- | | |
|---|-----------|
| (1) Day Open Air for Delicate Pupils ... | 9 pupils. |
| Boarding for Maladjusted and Partially Deaf Pupils | 1 pupil. |
- (f) Report to the Local Authority for the purpose of the Mental Deficiency Acts under :—
- | | |
|-------------------------|------------|
| (1) Subsection 3 | 31 pupils. |
| (2) Subsection 5 | 0 pupils. |
- Of Section 57 Education Act, 1944.
- (g) Other recommendations :—
- | | |
|---|------------|
| (1) Exclude from school temporarily and re-examine | 13 pupils. |
| (2) Refer to Paediatrician | 4 pupils. |
| (3) Refer to Psychiatrist | 7 pupils. |

In 135 other cases special educational treatment was recommended as follows :—

- (i) In an Ordinary Primary or Secondary School 7 pupils.
- (ii) An Open Air School for Delicate Pupils :—
- | | |
|---------------------|------------|
| (1) Day | 92 pupils. |
| (2) Boarding | 3 pupils. |
- (iii) A Boarding School for Physically Handicapped Pupils 4 pupils.
- (iv) A Hospital School for defects requiring specific medical or surgical treatment :—
- | | |
|--------------------------------|------------|
| (1) Orthopaedic Defects | 18 pupils. |
| (2) Epilepsy | 3 pupils. |
- (v) A Day Special School for Deaf Pupils ... 3 pupils.
- (vi) A Day Special School for Partially Deaf Pupils 5 pupils.

In the remaining 70 cases the pupils were found not to be Handicapped Pupils, and appropriate advice was given on various questions raised in connection with them.

Cleanliness Inspections and Other Work of the School Nurses. The arrangements for the examination and cleansing of infested pupils, which were described in the annual report for 1945 remained unchanged. The nurses continued the annual medical surveys of the pupils who were not examined during the year by a medical officer and also the vision testing. The following up of defects was also continued as previously.

The following is a summary of the work of the nurses :—

Number of cleanliness inspections at schools	...	...	135,849
Number of individual pupils found to be infested	...	...	2,464
Number of pupils cleansed by the nurses	...	...	66
Average number of visits paid to every school during the year for uncleanliness	...	...	18.6
Number of medical surveys carried out at school	...	...	15,597
Number of pupils referred from surveys to medical officers at clinics	...	...	1,043
Number of vision tests carried out at school	...	...	17,186
Number of pupils referred from vision tests to medical officers at clinics	...	...	936
Number of pupils specially inspected at school for infectious disease	...	...	693
Number of visits to homes, for following up defects, neglect, etc.	...	...	4,139

The number of individual pupils found to be infested, 2,464, was 10.1% of those on the registers compared with 13.2% in 1946 and 8.3% in 1945.

Medical Treatment. There were no changes in the general arrangements for the provision of medical treatment until October when the Authority approved as an additional arrangement an agreement with the Prince of Wales's Hospital, Plymouth, for the provision of all forms of In-Patient and Out-Patient Hospital Treatment.

A. HOSPITAL TREATMENT.

The arrangements with the hospitals worked satisfactorily throughout the year and the number of pupils treated at the hospitals were as follows :—

City (General) Hospital—In-Patients	...	...	766
Out-Patients	...	...	364
Mount Gold Orthopaedic Hospital—In-Patients	...		69
Out-Patients			169
Prince of Wales's Hospital—			
In-Patients (8 months only)	...	...	166
Out-Patients (8 months only)	...	...	944

B. MINOR AILMENT CLINICS.

During the year one of the rooms at the joint Maternity and Child Welfare and School Health Service Clinic at Crownhill was converted into a minor ailments treatment room, for use solely for this purpose, and the arrangements there are now satisfactory.

The alterations required at the North Prospect Clinic were not carried out and there were no changes at the other minor ailment clinics.

The total number of new cases treated at these clinics during the year was 13,255, and pupils made 70,894 attendances. The numbers of the different defects treated are given in Table III at the end of this report.

The medical officers made 7,431 Special Inspections at the clinics during the year and 3,870 re-inspections. The numbers of the various defects found to require treatment are included in Table II at the end of this report.

The largest number of defects requiring treatment were skin defects, followed by defects of the nose and throat, defective vision and other defects of the eye, ear defects and orthopaedic defects. Treatment for all these defects was provided at our own clinics as in previous years.

C. OPHTHALMIC CLINIC.

There were no changes in the arrangements at the Ophthalmic Clinic during the year, but discussions were held with the Plymouth Royal Eye Infirmary regarding the transfer of the clinic to the Eye Infirmary.

The School Oculist, Dr. W. H. Davis, held 147 sessions at the clinic at which he dealt with 2,449 errors of refraction and ordered spectacles for 989 pupils. He also dealt with 1,184 other defects of the eyes.

D. EAR, NOSE AND THROAT CLINIC.

The arrangements at the Ear, Nose and Throat Clinic remained unchanged, and Mr. R. Howarth, the Consultant Surgeon, held 79 sessions at the clinic during the year at which he saw 1,454 new cases and 634 old cases.

With the coming into operation of the agreement with the Prince of Wales's Hospital, Plymouth, arrangements were made with the hospital for operative treatment for adenoids and chronic tonsillitis and for other ear, nose and throat conditions similar to those in force at the City (General) Hospital. At the two hospitals 491 operations were carried out during the year for adenoids and chronic tonsillitis, and 50 operations for other ear, nose and throat defects. As a precautionary measure no operations were carried out in nose and throat cases for several months during the summer because of the epidemic of infantile paralysis.

Other forms of treatment were given in 369 cases during the year at the clinic and the hospitals.

E. ORTHOPAEDIC CLINIC.

There were no changes in the arrangements at the Orthopaedic Clinic, and Mr. C. J. Lillie, the Orthopaedic Surgeon, held 17 sessions at the clinic during the year at which he saw 370 new cases and 363 old cases.

The number of pupils treated at the clinic during the year for orthopaedic and postural defects was 396. Of these 163 were treated for poor posture, kyphosis, lordosis, scoliosis, etc., 116 for flat feet, 30 for other defects of the feet, including pes cavus and talipes, and 64 for genu valgum. The remaining 23 included 6 cases of anterior poliomyelitis, 4 of hemiplegia, 4 of defective gait and single cases of congenital dislocation of the hip, Perthe's disease, T.B. hip and torticollis.

There was a considerable decrease in the number of attendances for treatment and the number of treatments given, compared with 1946, due to the smaller number of pupils whom the orthopaedic surgeon found to require treatment and the larger number for whom he prescribed exercises at home instead of attendance at the clinic.

In cases where exercises were prescribed at home the pupils and their parents were invited to a demonstration of the exercises at the clinic and given a duplicated sheet on which the exercises were described.

Ultra-Violet Light Treatment.

One of the rooms at the Orthopaedic Clinic is used solely for ultra-violet light treatment and equipped with a Hanovia "Centro-sol" lamp and a Hanovia "Alpine Sun" lamp. In addition to those orthopaedic and postural cases who are given ultra-violet light treatment pupils are referred from the minor ailment clinics for this treatment for a variety of conditions, including debility, malnutrition, anaemia, blepharitis, furunculosis, adenitis alopecia, asthma, bronchitis, etc., and excellent results were obtained in the majority of the 341 pupils who were given this treatment during the year.

A Wood's glass was used with the Alpine Sun Lamp for the examination of 74 pupils who were referred for suspected ringworm of the scalp during the year.

The total number of attendances at the clinic during the year was 10,309 compared with 19,539 in 1946, and the number of treatments 12,269 compared with 24,342 in 1946.

F. SPEECH THERAPY.

The following report has been made by Miss M. McCombie, the Speech Therapist:—

"From January to March three Speech Clinics were open, at Rowe Street, High Street and North Prospect. The remaining sessions were employed in continuing the School Survey and the treatment in the Infant Departments of children noted during the previous year.

By April further clinical sessions were needed owing to the number of children of all ages awaiting treatment, and it was decided to discontinue the treatment given in the schools and, where possible, to arrange for the admission of these Infants to clinics (see report on Survey). One session each week was retained for continuing the Survey, and two additional clinics were opened at Albert Road and Crownhill.

In September there were some alterations in the clinics, but 10 sessions for treatment were retained. Albert Road was closed as most of the children had moved away from the district to the new housing estates, and Rowe Street and Crownhill were each given an extra session.

The number of children admitted increased through the year as more clinics opened to a total of 83 new cases, mainly boys, plus a few re-admissions, chiefly Cleft Palate cases who are given periods of treatment at regular intervals until they leave school. The majority of the cases were Speech Defects (Delayed Speech, Sigmatism, Excessive Nasality) as distinct from Stammerers and Cleft Palates. Attendance and progress maintained a good level since any child not satisfying these requirements was discharged.

Schools from which children were attending the clinics were visited whenever possible to keep in touch with the teachers and enlist their co-operation in treatment. The holidays allowed time for home visiting and interviewing.

School Survey.

During the year the Survey of Infant Departments was completed, 12 schools being visited and 2,036 children examined. 109 were found to require treatment, and of 25 serious cases, 13 were admitted to clinics. The remainder varied from noticeable to fairly slight cases whose speech may possibly adjust itself.

From January to March treatment continued in the schools of 83 children. 17 of these were cured during this period, and in April, when school treatment was discontinued, arrangements were made to admit 13 to clinics. It is unlikely that anything could be done for the remaining 53 children due to their parents' indifference, but only 13 of these had a serious disorder of speech and it is probable that the others may overcome their difficulty by themselves. There remain approximately 300 Infants noted as having a speech difficulty who have had no opportunity of receiving treatment—they are not severe cases, and it is probable that, again, some of these will be found to have adjusted themselves by the time their turn comes for admission to a clinic.

The Survey of the Junior and Modern Secondary Departments began in September and 19 Junior and 7 Modern Secondary Schools

were visited up to December and 153 children referred for treatment. All the children were not examined individually, as in the case of the Infant Departments, but only those selected by the teachers as being in need of treatment. Of the 153 children the majority had a marked speech difficulty and definitely required clinical treatment. Their claim for treatment is more pressing than that of the majority of Infant cases, and their age makes regular attendance at clinic and favourable response to treatment more probable so that every endeavour has been made to deal with the worst cases as soon as possible. 10 have been admitted to clinics, but it is likely to be some time before the remainder can receive treatment.

**Dental
Inspection and
Treatment.**

The following report has been made by the Senior Dental Officer, Mr. J. F. A. Smyth :—

“ The dental staff consisted of 1 Senior and 4 Assistant Dental Officers and 5 Dental Attendants, all employed whole-time on school work. The treatment of M. & C.W. patients is at present undertaken by a separate officer, but it is proposed that after July 5th, 1948, the two services shall be amalgamated. 1947 was the first year in which a Senior dental officer was responsible for the supervision of the service ; the staff was also larger than hitherto. Each dental officer is still, however, responsible for nearly 5,000 children, thus limiting the scope of the treatment which can be given. The increased number of older children due to the raising of the school-leaving age, and the treatment of pupils attending Secondary Grammar and Technical schools entails much additional work, the time required to treat Secondary children being two or three times more than for Primary.

Clinics.

In January the Clinic at Honicknowle school was opened. Only conservative work is carried out there, children needing extractions being treated at North Prospect during one weekly gas session. At Rowe Street one of the American dental units was installed early in the year, but the modifications which the different voltage made necessary were not completed till December. Treatment was carried out at all the five dental clinics throughout the year.

Sessions.

Work was carried out during 2,463 sessions, comprising 147 for inspection, 2,045 for treatment, 197 for gas administration and 73 for administrative work. Saturday mornings were chiefly reserved for casual cases, orthodontics, prosthetics and other special treatment.

Inspections.

19,655 children were inspected (Routine 18,469, Special 1,186). This was approximately 84% of the school population. The inspection of 12 schools (3,500 children) had to be left over to the following year.

At routine inspections the average attendance was 90% of the number on roll. Parents of all new admissions were invited to attend inspections in the Primary Schools. The apparent intention of the School Health Service Regulations is that entrants should be inspected each term, but it is impossible to devote the extra time necessary.

12,667 children (65%) were referred for treatment. This does not represent the total number who required treatment, which thorough inspection of certain schools indicated as being nearly 80%. Selective inspection on the principles advocated in Board of Education Circular 1523 was carried out at most schools, and certain children considered unsuitable or not in urgent need of treatment were not referred. I estimate that about 19,000 Plymouth children need treatment annually, and with the acceptance rate of 75% (which was the average in 1947) this is beyond the capacity of the present staff to treat. Broken appointments, however, reduce the number by nearly 20%. This unsatisfactory feature would be reduced if treatment could be offered immediately after inspections, and the benefit to the children of regular attendance and treatment became more fully recognized.

Treatment.

7,207 children were treated in 14,964 visits. The following table shows some of the treatment carried out.

	<i>Total.</i>	<i>Per child treated.</i>
1. Fillings—permanent teeth ...	10,481	1.5
2. Extractions—permanent teeth	1,938	0.3
3. Ratio of 1 and 2	5.4 : 1	—
4. Fillings—temporary teeth ...	2,103	0.3
5. Extractions—temporary teeth	7,241	1.0

It should be noted that not all the teeth extracted were unsaveable ; probably 15–20% of the permanent teeth were removed for orthodontic reasons, and 10% of the temporary teeth were over-retained. Records for the latter part of the year show that the number of permanent teeth filled was 84% of the number of fillings, i.e. about 8,824 teeth were filled. The table shows a definite improvement in the type of work carried out, fillings being higher and extractions lower, but the loss of temporary teeth is still distressingly high.

General anaesthesia was used for the majority of extractions and was administered in 3,624 instances. 466 teeth were extracted with local anaesthesia.

2,647 ‘ other operations ’ were performed on the permanent dentition, including 378 scalings and cleanings, as well as dressings, caps for fractured incisors and the fitting and adjusting of orthodontic appliances and dentures. 29 partial dentures were made to replace incisors lost through accident or neglect. 3 jacket crowns were fitted. ‘ Other operations ’ (numbering 423) on temporary teeth consisted mostly of the application of ammoniacal silver nitrate after rendering interstitial cavities self-cleansing.

X-rays for diagnosis were taken at Beaumont House, as the American dental X-ray machine was not converted to the appropriate voltage until early in 1948. No record of the number of cases X-rayed is available.

Orthodontics.

The demand for this treatment is greater than can be met and only certain selected children were treated. In spite of this the number of failures or partial failures was over 20%, caused in almost every case by lack of co-operation on the part of the child or parents. The care of appliances and perseverance in the treatment have tended to deteriorate since they have been provided and repaired

free of charge. Experience elsewhere tends to show that when the cost was borne by the parent there was more determination to ensure that full value was obtained from the treatment. Often the cases which can be corrected by the simplest means in a short time are the least co-operative, and vice versa.

In September, Mr. R. H. McKeag of Bath was appointed consultant orthodontist, models of difficult cases being sent to him by post. His advice on the 4 cases referred has been practical and most helpful. Permission was also given for the Senior dental officer to attend Mr. McKeag's postgraduate course at Bristol University Dental School. This course proved very valuable, and similar ones should be attended whenever possible by all the dental officers.

All the appliances were processed and finished by the dental mechanic employed in the Public Health Department, but in many cases the specialized preliminary work had to be carried out by the dental officers themselves. In 3 cases this was done by Mr. McKeag's own mechanic. If much orthodontic work is undertaken it will be necessary to employ a dental mechanic with special training or send the work to one of the leading commercial laboratories.

122 removable orthodontic appliances were fitted, and the results have been classified as follows by the dental surgeons.

			<i>Rowe Street.</i>	<i>City Hospital.</i>	<i>North Prospect.</i>	<i>Honic- knowle.</i>	<i>Total.</i>
Perfect	...	...	3	23	3	8	37
Fair	...	...	2	8	1	2	13
Some improvement	...	...	—	3	—	3	6
Case abandoned	...	...	3	15	—	7	25
Still under treatment	...	...	6	18	3	14	41
TOTAL			14	67	7	34	122

**Nutrition,
Milk and
Meals.**

All pupils examined at routine medical inspections during the year were classified for general condition and physical fitness in accordance with the requirements of the Minister of Education instead of for nutrition as in previous years and the number of classifications was reduced from four to three. It is not possible, therefore, to make a comparison of the figures for 1947 with those for 1946 and previously, but only 1.93% of the 8,196 pupils inspected during the year were classified as

being in poor general condition, and it is obvious that the improvements in nutrition which have been noted in recent years at least have been maintained. 74.2% were classified as being in good general condition and the remaining 23.87% as fair.

The number of pupils taking meals and milk in schools on a day in October, 1947, when a return was made to the Ministry of Education, was 4,824 or 21.8% in the case of meals and 19,977 or 90.4% in the case of milk, of a total of 22,086 pupils in attendance on that day, compared with 4,675 or 22.2% taking meals and 19,968 or 95% taking milk of the 21,014 pupils in attendance on a similar day in October, 1946.

A new and additional central kitchen with a capacity of 2,000 meals a day was opened towards the end of the year, and during December the number of pupils taking meals had increased to 6,147.

The persons employed in the handling of food in the kitchens during the preparation, cooking and serving of the meals were medically examined during the year as a preventive measure and Widal and other tests taken. All were found to be fit for this work except one woman with oral sepsis who was suspended from duty until she had received the necessary dental treatment. No cases of illness which could be attributed directly or indirectly to the meals were reported during the year.

All the milk supplied for cooking and drinking was pasteurised milk from sources approved by the Medical Officer of Health.

**Special
Schools.**

There were no changes in the medical arrangements at the special schools. All the pupils were re-examined during the year by the medical officers, and those at the Day Open Air School were examined at least once a term. The nurses gave 6,330 treatments for minor ailments at these schools during the year.

The Education Authority was advised in respect of 21 pupils at these schools to issue a report, under Section 57 (5) of the Education Act, 1944, to the Local Authority for the purposes of the Mental Deficiency Act, 1913, that they might require supervision after leaving school, and in respect of 8 pupils to issue a report under Section 57 (3) that they had been found incapable of receiving education at school.

**Boarding
Homes.**

The medical arrangements remained unchanged at the Boarding Home for Educationally Sub-normal Boys and the Children's Home, both of which were conducted satisfactorily throughout the year.

**Infectious
Diseases.**

During the year there was a further decrease in the incidence of diphtheria and scarlet fever in pupils attending schools maintained by the Authority. Only 32 cases of diphtheria were notified compared with 56 in 1946 and 86 in 1945, and 82 cases of scarlet fever compared with 137 in 1946 and 209 in 1945.

There was an outbreak of measles in the first quarter of the year affecting most of the primary schools, and at the end of February over 400 pupils were absent from school on account of measles. Apart from this there was no serious outbreak of infectious disease at any school, but two schools were visited as a preventive measure where several cases of scarlet fever had occurred and the pupils examined for missed cases and carriers, etc. Two other schools were similarly visited for chicken pox and one for plantar warts.

Diphtheria immunisation was carried out in schools as in previous years, and 2,478 injections were given in the schools and 890 pupils completely immunised during the year.

There was a further decrease in cases of scabies, and only 178 new cases were seen at the clinics compared with 257 in 1946 and 527 in 1945.

**Visit to
Switzerland.**

As mentioned in the introduction to this report the Authority accepted the invitation of the Swiss Red Cross to send 25 school children to Switzerland for a three months' holiday. A sub-committee was appointed to select the children, and 13 girls and 12 boys were selected after consideration of their health and family circumstances. The fathers of 9 of the children had been killed on active service, 2 had died during the war, 3 before the war, 2 were suffering from pulmonary tuberculosis, and 1 was ill in hospital after active service. The homes of 11 of the children had been destroyed or badly damaged by enemy action, and 8 of the children were attending the Open Air School and the others were delicate but attending ordinary schools.

Each child was medically examined before departure. A history of previous illnesses was obtained, the height and weight taken, an X-Ray of the chest done, immunisation against diphtheria and vaccination against smallpox performed and swabs taken for diphtheria. Children with active tuberculosis, heart disease, asthma and mental deficiency were excluded as required by the Swiss Red Cross and cases of pediculosis and scabies treated.

The 25 children left the City on the 6th May after a final medical inspection, and 23 of them returned on the 31st July. One boy was retained in Switzerland for a further period on account of his health and did not return to the City until the 13th September and one girl met with an accident in London on the journey home and was detained in hospital for a few days.

Twenty of the 25 children were re-examined on the 8th August, the others not keeping their appointments for examination. Of the 20 examined, 1 showed a loss of $\frac{1}{2}$ lb. in weight and 1 no change, but all the others showed gains ranging from $\frac{1}{2}$ lb. to $13\frac{1}{4}$ lb., the average gain being $3\frac{1}{2}$ lbs. for all 20 children compared with an average of $1\frac{1}{2}$ lbs. which would have been expected if they had remained at home. Taking all the physical factors noted at the re-examination into account one child was considered to be immensely improved, 5 much improved, 8 slightly improved, and 6 little changed. All appeared to have enjoyed their holiday immensely and their parents were correspondingly grateful.

Miscellaneous. Special examinations of pupils for fitness for employment out of school hours and for entertainment licences were made at the clinics as in previous years, and the numbers are included in the total of 7,431 special examinations made at the clinics. Adult trainees under the Ministry of Labour scheme for disabled persons were also seen at the clinics regarding fitness for the training arranged for them.

Various lectures and talks on the School Health Service were given by the Senior Medical Officer to medical practitioners, nurses in training as Queen's Nurses, students from Teachers' Training Colleges, and organised groups at Community Centres, and visits were arranged to clinics and special schools.

MINISTRY OF EDUCATION

MEDICAL INSPECTION RETURNS

YEAR ENDED 31ST DECEMBER, 1947.

TABLE I.

MEDICAL INSPECTION OF PUPILS ATTENDING MAINTAINED PRIMARY AND SECONDARY SCHOOLS.

A.—PERIODIC MEDICAL INSPECTIONS.

Number of Inspections in the prescribed Groups :—

Entrants	...	...	...	...	...	2032
Second Age Group			...	...	...	3541
Third Age Group	...	...	...	...	...	2377
Total						7950

Number of other Periodic Inspections ... 246

Grand Total ... 8196

B.—OTHER INSPECTIONS.

Number of Special Inspections	...	...	...	9670
Number of Re-Inspections	...	...	...	7851
Total				17521

C.—PUPILS FOUND TO REQUIRE TREATMENT.

NUMBER OF INDIVIDUAL PUPILS FOUND BY PERIODIC MEDICAL INSPECTION TO REQUIRE TREATMENT (excluding Dental Diseases and Infestation with Vermin).

<i>Group.</i> (1)	<i>For defective vision (excluding squint).</i> (2)	<i>For any of the other conditions recorded in Table IIA.</i> (3)	<i>Total individual pupils.</i> (4)
Entrants	11	468	475
Second Age Group ...	126	677	782
Third Age Group ...	131	363	476
Total (prescribed groups)	268	1508	1733
Other Periodic Inspections	28	71	88
GRAND TOTAL ...	296	1579	1821

TABLE II.

A.—RETURN OF DEFECTS FOUND BY MEDICAL INSPECTION IN THE YEAR.

<i>Defect Code No.</i>	<i>Defect or Disease.</i> (1)	PERIODIC INSPECTIONS.		SPECIAL INSPECTIONS.	
		<i>No. of defects.</i>		<i>No. of defects.</i>	
		<i>Requiring treatment.</i> (2)	<i>Requiring to be kept under observation, but not requiring treatment.</i> (3)	<i>Requiring treatment.</i> (4)	<i>Requiring to be kept under observation, but not requiring treatment.</i> (5)
4	Skin	209	64	1514	40
5	Eyes—(a) Vision	296	576	566	50
	(b) Squint	91	96	82	10
	(c) Other	191	16	252	6
6	Ears—(a) Hearing	45	60	79	5
	(b) Otitis Media	50	12	148	11
	(c) Other	31	17	183	10
7	Nose or Throat	449	776	931	189
8	Speech	26	32	56	3
9	Cervical Glands	78	268	22	20
10	Heart and Circulation ...	61	147	48	25
11	Lungs	124	144	119	82
12	Developmental—(a) Hernia ...	12	7	12	1
	(b) Other	11	38	19	13
13	Orthopaedic—(a) Posture ...	140	81	40	6
	(b) Flat Foot... ..	187	85	68	19
	(c) Other	114	102	120	48
14	Nervous System—				
	(a) Epilepsy	5	3	7	3
	(b) Other	17	37	42	30
15	Psychological—				
	(a) Development	12	255	26	16
	(b) Stability	7	12	47	48
16	Other	120	87	1776	195

B.—CLASSIFICATION OF THE GENERAL CONDITION OF
PUPILS INSPECTED DURING THE YEAR IN THE AGE
GROUPS.

<i>Age Groups.</i>	<i>Number of pupils inspected.</i>	A. (<i>Good</i>). <hr/>		B. (<i>Fair</i>). <hr/>		C. (<i>Poor</i>). <hr/>	
		<i>No.</i>	<i>% of col. 2</i>	<i>No.</i>	<i>% of col. 2</i>	<i>No.</i>	<i>% of col. 2</i>
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Entrants	2032	1657	81.54	345	16.98	30	1.48
Second Age Group ...	3541	2603	73.51	878	24.8	60	1.69
Third Age Group	2377	1790	75.31	553	23.26	34	1.43
Other Periodic Inspections	246	32	13.01	180	73.17	34	13.82
TOTAL	8196	6082	74.20	1956	23.87	158	1.93

TABLE III.

TREATMENT TABLES.

GROUP I.—MINOR AILMENTS (excluding Uncleanliness, for which
see Table V).

(a)	<i>Number of Defects treated, or under treatment during the year.</i>
SKIN.	
Ringworm—Scalp—	
(i) X-Ray treatment	12
(ii) Other treatment	29
Ringworm—Body	182
Scabies	178
Impetigo	425
Other skin diseases	2736
Eye Disease	383
(external and other, but excluding errors of re- fraction, squint and cases admitted to hospital)	
Ear Defects	566
Miscellaneous	8744
(e.g. minor injuries, bruises, sores, chilblains, etc.)	
Total	13255

(b) Total number of attendances at Authority's minor ailment clinics	70894
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GROUP II.—DEFECTIVE VISION AND SQUINT (excluding Eye Disease treated as Minor Ailments—Group I).

				<i>No. of defects dealt with.</i>
ERRORS OF REFRACTION (including squint)	...			2449
Other defect or disease of the eyes (excluding those recorded in Group I)	...	...	...	1184
			Total	3633

No. of Pupils for whom spectacles were—				
(a) Prescribed	...	...	...	989
(b) Obtained	...	...	...	989

GROUP III.—TREATMENT OF DEFECTS OF NOSE AND THROAT.

			<i>Total number treated.</i>
Received operative treatment—			
(a) for adenoids and chronic tonsillitis	...		491
(b) for other nose and throat conditions	...		50
Received other forms of treatment	...	...	369
		Total	910

GROUP IV.—ORTHOPAEDIC AND POSTURAL DEFECTS.

(a) No. treated as in-patients in hospitals or hospital schools	76
(b) No. treated otherwise, e.g. in clinics or out-patient departments	522

GROUP V.—CHILD GUIDANCE TREATMENT AND SPEECH THERAPY.

No. of pupils treated—			
(a) under Child Guidance arrangements	...	...	Nil.
(b) under Speech Therapy arrangements	...	...	119

TABLE IV.

DENTAL INSPECTION AND TREATMENT.

(1)	Number of pupils inspected by the Dentist :—						
	(a) Periodic Age Groups	...	...	...	...	18469	
	(b) Specials	...	...	...	...	1186	
	(c) Total (Routine and Specials)	...	...	...	...	19655	
(2)	Number found to require treatment			...	...	12667	
(3)	Number actually treated	...	...	...	...	7207	
(4)	Attendances made by pupils for treatment				...	14964	
(5)	Half-days devoted to—						
	Inspection	...	...	...	...	147	
	Treatment	...	...	...	...	2243	
					TOTAL	...	2390
(6)	Fillings—						
	Permanent Teeth	...	...	...	...	10481	
	Temporary Teeth	...	...	...	...	2103	
					TOTAL	...	12584
(7)	Extractions—						
	Permanent Teeth	...	...	...	...	1938	
	Temporary Teeth	...	...	...	...	7241	
					TOTAL	...	9179
(8)	Administrations of general anæsthetic for extractions					3624	
(9)	Other Operations—						
	Permanent Teeth	...	...	...	...	2667	
	Temporary Teeth	...	...	...	...	423	
					TOTAL	...	3090

TABLE V.
INFESTATION WITH VERMIN.

(i) Total number of examinations in the schools by the school nurses or other authorized persons	... 135849
(ii) Total number of individual pupils found to be infested	... .. 2464
(iii) Number of individual pupils in respect of whom cleansing notices were issued (Section 54 (2), Education Act, 1944)	... .. 12
(iv) Number of individual pupils in respect of whom cleansing orders were issued (Section 54 (3), Education Act, 1944)	... .. Nil.

TABLE VI.
SCHOOL MEDICAL AND DENTAL STAFF.

<i>Names of Medical Officers.</i>	<i>Proportion of whole time (expressed as a percentage) devoted to</i>	
	<i>School Health Service.</i>	<i>Public Health.</i>
S.M.O. Dr. T. Peirson	20%	80%
Senior M.O. Dr. T. H. Harrison	100%	
A.S.M.O.s Dr. G. B. Carter	88.0%	12.0%
Dr. M. S. Harvey	63.5%	36.5%
(Resigned 29.12.47)		
Dr. N. R. Matheson	93.9%	6.1%
Dr. J. H. Wood	89.5%	10.5%
(Commenced duty 18.8.47)		
<i>Names of Dental Officers.</i>		
Senior Dental Officer.		
Mr. J. F. A. Smyth	100%	
Assistant Dental Officers.		
Mr. E. Williams	100%	
Mr. F. J. Gray	100%	
Mr. R. A. Currie	100%	
Mr. F. R. Maynard	100%	

<i>Nurses.</i>	<i>Number of Officers.</i>	<i>Aggregate of time given to School Health Service work in terms of whole-time Officer.</i>
School Nurses	10	10 whole time.
District Nurses	—	—
Nursing Assistants	2	2 whole time.
Dental Attendants	5	5 whole time.

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